DOCUMENT RESUME

ED 134 617 95 TM 006 025

TITLE	Assessment of Selected Resources for Severely Handicapped Children and Youth. Volume 4: Case Studies of Provider Services.
INSTITUTION	Abt Associates, Inc. Cambridge, Mass.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C. Office of Planning, Budgeting, and Evaluation.
REPORT NO	AAI-74-115
PUB DATE	Nov 74
CONTRACT	OEC-0-73-7030
NOTE	289p.; For related documents, see TM 006 022-025; Some pages may be marginally legible due to print quality of original
EDRS PRICE	MF-$0.83 HC-$15.39 Plus Postage.
DESCRIPTORS	*Case Studies; Costs; Day Care Services; Deaf Blind; Emotionally Disturbed; Handicapped Children; Institutional Environment; Mental Retardation; Multiply Handicapped; Observation; Residential Care; *Services; *Severely Handicapped; Youth

ABSTRACT

This volume is one of several which describe the characteristics, quality, and costs of services to severely mentally retarded, severely emotionally disturbed, deaf-blind, and severely multiply handicapped clients aged 21 and under, in 100 providers across the nation. This volume presents the case studies organized according to the major handicapping conditions under study in the project. Providers were grouped for case study description according to whether they served a majority (75 percent or more) of severely mentally retarded, severely emotionally disturbed, deaf-blind, or severely multiply handicapped. A number of providers included in the study which do not serve a clear majority of children with one of these handicapping conditions were grouped together in the fifth and final case study. Each case study includes the following sections: summary; overview; characteristics of providers; observations of severely handicapped children and youth and the staff serving them; costs of provider services to severely handicapped children and youth; and quality of those services. Notable differences in day versus residential providers are described in the last paragraph of each section of the case studies. (RC)

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ASSESSMENT OF SELECTED RESOURCES FOR SEVERELY HANDICAPPED CHILDREN AND YOUTH

Volume 4: Case Studies of Provider Services

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AAI Report No. 74-115

November, 1974

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PREFACE

Project Overview

In July, 1973 Abt Associates was awarded a contract by the Office of Planning, Budgeting and Evaluation (OPBE) of the United States Office of Education to conduct a nationwide "Assessment of Selected Resources for Severely Handicapped Children and Youth" (Contract No. OEC-0-73-7030). The present volume is one of a 5-volume series produced over the course of the project to describe the characteristics, quality and costs of services to severely mentally retarded, severely emotionally disturbed, deaf-blind and severely multiply handicapped clients aged 21 and under, in 100 providers across the nation.

For the purposes of this study, "severely" handicapped children and youth were functionally defined as those persons aged 21 and under who are either mentally retarded, emotionally disturbed, deaf-blind or multiply-handicapped and who exhibit 2 or more of the following behaviors with a high degree of regularity:

- Self-mutilation behaviors such as head banging, body scratching, hair pulling, etc. which may result in danger to oneself;
- Ritualistic behaviors such as rocking, pacing, autistic-like behaviors, etc. which do not involve danger to oneself;
- Hyperactive-aggressive behaviors which are dangerous to others;
- Self-stimulation behaviors such as masturbation, stroking, patting, etc. for a total for more than 1 hour of a waking day;
- Failure to attend to even the most pronounced social stimuli, including failure to respond to invitations from peers or adults, or loss of contact with reality;
- Lack of self-care skills such as toilet training, self-feeding, self-dressing and grooming, etc.;
- Lack of verbal communication skills;
- Lack of physical mobility including confinement to bed, inability to find one's way around the institution or facility, etc.

The project was conducted in three phases: I) review of the literature and development of a state-of-the-art paper and annotated bibliography; II) conduct of a survey of potential providers of services to severely handicapped clients aged 21 and under and the development of data collection instruments for use in the third phase; III) site visits to 100 providers, data analysis and report writing.

Phase I consisted of an extensive review of the literature for the purpose of developing an annotated bibliography and state-of-the-art paper on research and services for severely handicapped children and youth. Volumes 1 and 2 of the series were developed during this phase of the study.

Phase II included the development of data collection instruments for use during the third phase and a mail survey of potential providers of services to severely handicapped children and youth across the nation. The survey was conducted for the purpose of creating a pool of providers from which 100 facilities could be selected for site visits. From the 1,550 respondents to the mail survey, 100 providers were selected who serve severely handicapped clients aged 21 and under. The selection of the 100 providers was accomplished by grouping the respondents to the survey into 8 sampling categories according to whether they offered primarily day or residential services and according to the number of severely handicapped clients aged 21 and under they served. In order to obtain a final sample of providers which served a range of handicapping conditions, providers were also selected based upon whether they served a majority of clients who are either severely mentally retarded, severely emotionally disturbed, deaf-blind, or severely multiply-handicapped. In addition, some providers were selected who served a mixed severely handicapped population.

Phase III of the study consisted of data collection, analysis and report writing. Each of the 100 providers in the final sample were visited by 2 Abt Associates field staff for approximately 2 days during May or June, 1974. During these visits the Abt field staff conducted interviews with the program or institution director; selected ward, unit or classroom staff who were most knowledgeable about the services being offered to severely handicapped clients; and the budget director or other personnel most knowledgeable about the provider's budget and costs of services. In addition, 1 member of the field team spent 1 of the 2 days observing severely handicapped clients throughout the facility. These data were analyzed by Abt Associates project staff and descriptive case studies were written to provide a composite picture of the characteristics, quality, and costs of provider services to severely handicapped clients.

The output of the study consists of a 5-volume final report as follows:

Volume 1: A State-of-the-Art Paper
Volume 2: A Selected, Annotated Bibliography
Volume 3: Data Analysis and Results
Volume 4: Case Studies of Provider Services
Volume 5: Conclusions and Recommendations

ACKNOWLEDGMENTS

The project directors of this study are deeply indebted to many, many people for their cooperation and assistance in all phases of the project. First and foremost, we wish to thank the directors, staff and clients of the 100 providers included in the study for the extremely warm, open reception they offered us: we continue to be extremely impressed by the amount of effort directors and staff devoted to responding to interviews and the conduct of observations by Abt Associates field personnel, as well as by their genuine interest in receiving feedback and suggestions for bettering their services to severely handicapped clients.* To the clients at the 100 providers we wish to extend our special thanks; it is to these children and youth that we dedicate these reports.

A number of providers not included in the study were kind enough to allow us to pretest field instruments and procedures in the early phase of the project. The staff of the Belchertown State School, Belchertown, Massachusetts; the West Springfield Developmental Day Care Center, West Springfield, Massachusetts; the Fernald State School, Waltham, Massachusetts; and the Pacific State Hospital, Pomona, California deserve special thanks for their timely feedback at a most critical juncture in the study. The staff of the Walker Home for Children in Needham, Massachusetts, particularly Charlie Noble, Al Treischman and Krikor Derhohannesian, were enormously helpful in the refinement of instruments as well as in providing videotape equipment for use in the training of observers. Harriet Klebanoff of the Media Resource Center also supplied a number of very useful films for the same purpose. M. Michael Klaber of the University of Hartford was extremely generous in allowing us to use a revised version of an observation instrument which he developed for

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*Note: Because providers were assured complete anonymity in the study, the names of the 100 providers are not linked to any data and, hence, do not appear in any of the reports. However, with the permission of each director, the names of 99 (one provider declined to be listed) of the providers included in the study are listed alphabetically on page vii following.

his study entitled, Retardates in Residence: A Study of Institutions (1967). For Dr. Klaber's willingness to share the instrument with us, we are most grateful.

The Abt Associates field supervisors and observers who visited the 100 sites and collected the data reported herein worked tirelessly and effectively even under difficult field conditions. We wish to thank Joel Braun, Mickey Conte, David Danforth, John Doucette, Vivian Eichler, Barbara Epstein, Janet Fentin, Gail Fenton, Annette Ferstenberg, Margo Giroux, Shirley Giurlani, Barbara Goodman, Pat Huff, Cheri Hurst, Betty May Irwin, Muriel Kendrix, Wendell Knox, Jim Leath, Connie Long, Sidney (Bones) Mason, Margie O'Farrell, Marj Scarlett, Mona Stein, Lorrie Stuart, Kay Sweeney, Day Thomson, Donna Warner and Bonnie Wilpon. Without the efforts of these staff members, a report such as this could not possibly have been written.

To John Doucette, who is primarily responsible for the contents of Volume 3 and for the enormous amount of computer work done on the study, we extend many thanks and commendations. Special thanks go to Ruth Freedman, Chris Hamilton, Wendell Knox, Linda Stebbins and Diane Stoner of Abt Associates and to Bonnie Wilpon of Fernald State School for their assistance in the development of instruments, training of field staff and writing of the final report.

To Marj Scarlett, our inimitable contract secretary/administrative assistant we are sincerely indebted. For her intelligence, dedication and ability to carry out all phases of contract tasks, we are extremely fortunate and grateful. Deborah Mackiernan and the many secretaries she supervised are also much appreciated for the many days and nights of typing done on these reports.

Finally, we wish to thank Betty Rasmussen, our project monitor, and Bob Maroney, of the Office of Planning, Budgeting and Evaluation of the U.S. Office of Education, for their invaluable direction and assistance in ensuring that the reports would meet the needs of decision-makers concerned with the development of policy relating to services for severely handicapped children and youth. For their interest and commitment to the study as well as their trust, enthusiasm and support, we are deeply grateful.

Patricia Cook, Project Director
Elinor Gollay, Deputy Project Director

November, 1974

Listed alphabetically below are 99 of the 100 providers visited by Abt Associates field personnel in gathering data for this study.

Alabama Institute for Deaf and Blind
Talladega, Alabama

A. G. Bell School for the Deaf
Cleveland, Ohio

American Institute for Mental Studies
The Training School Unit
Vineland, New Jersey

Arizona State School for the Deaf and Blind
Tucson, Arizona

Arkansas Enterprise for the Blind
Little Rock, Arkansas

Bide a Wee Home
El Cajon, California

Blind Children's Resource Center
Portland, Maine

Brookline Public Schools
Brookline, Massachusetts

Callier Center for Communication Disorders
Dallas, Texas

Cedar Grove Children's Home
Angwin, California

Center for Multiple-Handicapped Children
New York, New York

Cerebral Palsy and Orthopedic School
Greensboro, North Carolina

Cerebral Palsy Foundation of Southern Arizona, Inc.
Tucson, Arizona

The Children's Village
Dobbs Ferry, New York

Cincinnati Center for Developmental Disorders, Autistic Program
Cincinnati, Ohio

Civitan Daycare Center
Tampa, Florida

Clear View School
Dobbs Ferry, New York

Community Services for Exceptional Citizens, Inc.
Oak Ridge, Tennessee

Cooperative School for Handicapped Children
Alexandria, Virginia

Corvallis School District 509J
Corvallis, Oregon

Countryside Center for the Handicapped
Barrington, Illinois

Dean School, Inc.
Fort Worth, Texas

DeKalb Training Center for the Mentally Retarded
Scottdale, Georgia

Developmental Center of the Woodstock Learning Clinic
Woodstock, Vermont

Dr. U. E. Zambarano Memorial Hospital
Wallum Lake, Rhode Island

Eastern Nebraska Community Office of Retardation (ENCOR)
Omaha, Nebraska

East San Gabirel Valley School for Multi-Handicapped Children
Glendora, California

Elkhart County Association for the Retarded, Inc.
Bristol, Indiana

Episcopal Church Home for Children
York, South Carolina

Ernest L. Herrman School
Lowell, Massachusetts

Fairview Hospital and Training Center
Salem, Oregon

Fulton County West Training Center of the Retarded
Atlanta, Georgia

Glenwood State Hospital School
Glenwood, Iowa

Great Bay Center
Newington, New Hampshire

The Haven School, Inc.
Miami, Florida

Henry Ittleson Center for Child Research
Riverdale, New York

Hillsborough Association for Retarded Citizens
Tampa, Florida

Hughen School for Crippled Children
Port Arthur, Texas

Idaho State School for the Deaf and the Blind
Gooding, Idaho

Infant, Toddler and Preschool Research and Intervention Project
Nashville, Tennessee

J. A. Johnson Crib Care Home
Lee's Summit, Missouri

Kalevala Tutoring School, Inc.
Philmont, New York

League School of Boston
Boston, Massachusetts

Les Passees Rehabilitation Center, Children's Division
Memphis, Tennessee

Little Angels Nursing Home
Elgin, Illinois

Logansport State Hospital
Logansport, Indiana

Lovegrove Elementary School, DuValle County
Jacksonville, Florida

Marshall-Starke Development Center, Inc.
Plymouth, Indiana

May Institute for Autistic Children, Inc.
Chatham, Massachusetts

McKeesport Preschool for Exceptional Children
McKeesport, Pennsylvania

Mental Health Institute
Mt. Pleasant, Iowa

Michele's Little Ones
Santa Rosa, California

Michigan School for the Blind
Lansing, Michigan

Montanari Residential Treatment Center
Hialeah, Florida

Moody School, University of Texas Medical Branch
Galveston, Texas

Mount Carmel Guild Child Study Center
Ridgefield Park, New Jersey

Multiple Handicap Project, Kennedy Experimental School
Peabody College
Nashville, Tennessee

Nanon Wood Achievement School
Effingham, Illinois

Nelson House
Spruce Creek, Pennsylvania

The New York Institute for the Education of the Blind
Bronx, New York

North Dakota School for the Deaf
Devils Lake, North Dakota

North Dakota State School for the Blind
Grand Forks, North Dakota

Northville Residential Training Center
Northville, Michigan

O'Berry Center
Goldsboro, North Carolina

Oregon School for the Blind
Salem, Oregon

Our Lady of Providence
Northville, Michigan

The Parry Center for Children
Portland, Oregon

Parsons State Hospital and Training Center
Parsons, Kansas

Plymouth Center for Human Development
Northville, Michigan

Pre-Schooler's Workshop
Garden City, New York

Providence Child Center
Portland, Oregon

Ridge Area Association for Retarded Citizens
Sebring, Florida

Roger Walton Development Center
Stockton, California

Ronoh School for Disturbed Children
Richmond, California

St. Cloud Children's Home
St. Cloud, Minnesota

St. Louis State School and Hospital
St. Louis, Missouri

San Diego Children's Home Association
San Diego, California

Santa Barbara County Autism Project
Santa Barbara, California

Seaside Regional Center
Waterford, Connecticut

Southeast Louisiana Hospital
Mandeville, Louisiana

Spaulding Youth Center
Tilton, New Hampshire

State Home and Training School
Wheat Ridge, Colorado

State School for Retarded
Fulton, Missouri

Sunland at Tallahassee
Tallahassee, Florida

Sunland Training Center
Gainesville, Florida

Traverse City State Hospital
Traverse City, Michigan

Travis State School
Austin, Texas

United Cerebral Palsy Association of Fairfield County, Inc.
Bridgeport, Connecticut

United Cerebral Palsy of Denver, Inc.
Denver, Colorado

University of Alabama
University, Alabama

University Affiliated Facility
University of Kansas Medical Center
Kansas City, Kansas

Day Treatment Unit, Division of Child Psychiatry
University of Washington
Seattle, Washington

Valley of the Sun School
Phoenix, Arizona

Walker Home for Children, Inc.
Needham, Massachusetts

The Wallace Village for Children
Broomfield, Colorado

West Virginia Schools of the Deaf and Blind
Romney, West Virginia

William W. Fox Children's Center
Dwight, Illinois

Wisconsin Child Center
Sparta, Wisconsin

Youth Treatment Unit, Vermont State Hospital
Waterbury, Vermont

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FIGURE CROSS REFERENCE

The following figure cross reference is provided to assist the reader in making comparisons across case studies of the data presented in the figures.

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	Mentally retarded		Emotionally disturbed		Deaf-blind		Multiply-handicapped		Mixed population	
	Fig. no.	Page	Fig. no.	Page	Fig. no.	Page	Fig. no.	Page	Fig. no.	Page
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CHAPTER I

INTRODUCTION

1.0 INTRODUCTION

1.1 Case Study Organizaton and Definition of Terms

The purpose of Volume 4: Case Studies of Provider Services to Severely Handicapped Children and Youth is to describe, using the case study method, the characteristics, quality and costs of services to severely mentally retarded, severely emotionally disturbed, deaf-blind and severely multiply-handicapped children and youth aged 21 and under, in 100 providers across the nation.

In consultation with OPBE staff, a decision was made to organize the case studies according to the major handicapping conditions under study in the project. Therefore, providers were grouped for case study description according to whether they serve a majority (75% or more) of severely mentally retarded, severely emotionally disturbed, deaf-blind or severely multiply-handicapped clients aged 21 and under. A number of providers included in the study which do not serve a clear majority of children with one of these handicapping conditions are grouped together in the fifth and final case study. The 5 case studies presented in this volume are as follows:

(1) A Case Study of Providers of Services to Severely Mentally Retarded Children and Youth;

(2) A Case Study of Providers of Services to Severely Emotionally Disturbed Children and Youth;

(3) A Case Study of Providers of Services to Deaf-blind Children and Youth;

(4) A Case Study of Providers of Services to Severely Multiply-handicapped Children and Youth; and

(5) A Case Study of Providers of Services to Children and Youth With a Variety of Severely Handicapping Conditions.

To facilitate comparison between papers the organization, format and illustrations used across the case studies are identical. Therefore, each case study includes the following sections:

(1) Summary;

(2) Overview;

(3) Characteristics of Providers;

(4) Observations of Severely Handicapped Children and Youth and the Staff Serving Them;

(5) Costs of Provider Services to Severely Handicapped Children and Youth; and

(6) Quality of Provider Services to Severely Handicapped Children and Youth.

Notable differences in day versus residential providers are described in the last paragraph of each section of the case studies. For the purposes of this study, day providers were defined as those facilities which provide only nonresidential (i.e., outpatient) services. Residential providers were defined as those facilities which provide some residential (i.e., inpatient) services and which may provide some nonresidential services as well.

Throughout the case studies a number of terms used over the course of the project will appear. What follows is a description of:

- The 7 "service components" or areas used to identify and describe the range of services offered by providers;
- The 12 staff job categories used in the study;
- The analysis of costs of provider services to severely handicapped children and youth;
- The Observation Schedule and observation procedures; and
- The assessment of "quality" across providers.

Within the case studies no explanation of these terms will appear; therefore, the reader should refer back to this introductory section for their description as necessary.

1.2 Service Components

Seven discrete service components or areas were identified which constitute the range of provider services to severely handicapped clients. Providers were asked to estimate what portion of direct care staff time within the various job categories (excluding administration and support staff, see p. 12 following) is spent in providing each of the 7 types of service to severely handicapped children and youth. Therefore, data were collected on the approximate amount of time therapists, teachers, psychiatrists, etc. spend on each service component at each of the 100 providers studied. Within each case study then, information is provided on the amount of time each staff category spends on each service component at the 17 providers which serve a majority of severely mentally retarded clients; the 20 providers which serve a majority of severely emotionally disturbed clients, and so on.

The service components used in the study are as follows:

(1) Basic Care: This includes feeding clients, toileting and dressing clients, providing routine medical services such as dispensing of medications, band-aids, temperature taking, and general supervision of clients in a group.

(2) Educational and Habilitative Services: This includes all direct services for clients which are aimed at improving their level of self-sufficiency and intellectual functioning. Specifically, we are concerned with education and instructional services, prevocational and vocational training, occupational therapy, recreation, speech therapy, sensory awareness activities, music therapy, etc.

(3) Medical Services: This includes all direct services for clients which are aimed at improving their physical condition. Specifically, we are concerned with regular periodic medical and dental examinations, specialized medical services including corrective surgery aimed at improving appearance as well as physical capability, and physical therapy.

(4) Family and Community Services: This includes all services not aimed directly at the clients who are served at the facility, but aimed at clients' parents, siblings, and their community, as well as at clients in other programs or at home. This includes counselling for families, parent meetings, community education efforts such as lectures and mass media exposure, home visits, and consultation.

(5) Diagnosis and Referral Services: This includes services aimed not at directly benefiting the client, but at ensuring that the client receives the most appropriate services. Included here are client outreach and identification, testing, diagnosis and client assessment, referral to other agencies, placement in appropriate programs, and follow-up of clients.

(6) Administration and Staff Support: This includes services oriented towards the management of the facility and the supervision of staff. Included would be staff recruiting, training and supervision, policy formulation and implementation.

(7) Support Services: This includes all services aimed at operation of the facility such as food preparation, laundry, building maintenance, and repairs.

1.3 Staff Job Categories

Due to the fact that there is little uniformity in staff job titles in social service programs even though functional job roles may be identical, a decision was made to construct staff job categories to be used across the 100 providers for the purpose of cost calculations and description of staff characteristics. The job categories which appear below represent the range of role functions which exist in most providers serving handicapped clients. The 100 providers included in the study were asked to apply these standard categories even though the titles used in their facilities might differ substantially.

The 12 staff job categories used in the study are as follows:

(1) Administrator: This includes the staff whose primary function is supervising other staff, or assisting in the management of the organization rather than direct care of clients. Examples of staff included are: Director, Business Manager, Accountant, Personnel Director, Secretaries, Clerks, Receptionist, Division or Unit Directors, Program Coordinators, etc.

(2) Medical Doctor: This includes all physicians except psychiatrists.

(3) Psychiatrist: This includes only psychiatrists.

(4) Psychologist: This includes all staff who perform various psychological functions such as counselling, staff consultation, testing, regardless of specific degree. Included can be people called psychologists who have B.A.'s, M.A.'s or Ph.D.'s in psychology or counselling.

(5) Social Worker: This includes all staff who perform various social work functions including counselling, community liaison, welfare and other payment negotiations, regardless of specific degree. Included can be people called social workers who have a B.S.W., M.S.W., or other related degrees.

(6) Therapist: This includes staff who perform various types of therapy other than counselling. Specifically, this includes occupational therapists, speech therapists, recreation therapists, physical therapists, music therapists. Included are licensed therapists, aides and assistants.

(7) Nurse: Included here are staff who perform primarily nursing functions including dispensing medications, assisting physicians, etc. Included are both Registered Nurses and Licensed Practical Nurses as well as physician's assistants, medics, etc.

(8) Attendant: Included here are staff whose primary function is to take care of the basic needs of clients such as toileting, feeding, dressing, etc. They are considered attendants even if there are other more habilitative roles assigned in addition to these primary functions. These are generally jobs for which there is no special requirement in terms of training or education.

(9) Teacher (Certified): Included here are certified teachers.

(10) Teacher (Noncertified or Aides): Included here are staff used as integral parts of the educational or habilitative program but who have less education and training than full teachers, or who are not certified. Frequently they work with a certified teacher.

(11) Support Staff: This includes staff who perform non-direct service jobs which are primarily oriented towards maintenance and operation of the facility. Included are cooks, drivers, janitors, maintenance men, laundry workers, etc.

(12) Other: All staff not covered in the above categories.

1.4 Costs of Provider Services

In calculating the costs of the 100 providers included in the study, the costs of serving severely handicapped clients, aged 21 and under, were separated from costs of serving other clients at the provider (i.e., non-severely handicapped clients and/or clients over age 21). Therefore, the costs described in the summary sections of the 5 case studies refer only to the costs of servicing severely mentally retarded, severely emotionally disturbed, deaf-blind and severely multiply-handicapped children and youth, aged 21 and under.

For the purpose of the cost analysis, all costs were considered to be either personnel or non-personnel items. The category of personnel costs includes the salaries of provider personnel in each of the 12 staff categories used in the study; salaries of consultants and contracted personnel; and fringe benefits (FICA, health insurance, life insurance, tuition reimbursements, and retirement). Non-personnel costs include space, transportation, consumable supplies, capital outlay, equipment rental, property insurance, taxes and non-personnel contracts.

Per capita expenditures were calculated by dividing total costs for the provider (personnel and non-personnel costs) by the total number of severely handicapped clients, aged 21 and under, served by the provider.

1.5 The Observation Schedule and Observation Procedures*

Introduction

The Observation Schedule (OS) was designed to record the behaviors and activities of severely handicapped subjects and any interactions they had with other persons in their environment: the staff or other clients. The Observation Schedule provided "snapshots" of each subject's daily life in the provider and a general flavor of the provider's context by recording the behaviors of specific subjects, as well as the subjects' interactions with their environment, and other clients' behaviors and interactions.

The Observation Schedule was divided into 2 major sections -- Client Items and Staff Items. The behaviors of the subject and any other clients in the observation setting were recorded under the Client section. Similarly, any staff behaviors observed were recorded on the Staff section.

Sampling Procedures

One observer observed at each provider for approximately 1 8-hour day, starting at 8:30 a.m. Observations were of 5 minutes duration, followed by a rest period of 5 minutes, after which a new observation of another subject began. Observations were conducted in series of 3. Hence, in an 8-hour day approximately 12 series of observations (or 36 observations on individual children) were completed.

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*Note: this Observation Schedule is adapted from observation instruments which were developed by M. Michael Klaber for use in his study, Retardates in Residence, A Study of Institutions (1967), University of Hartford, West Hartford, Connecticut. With Dr. Klaber's permission the format of the original instruments has been extensively modified for use in this study; however, a considerable number of the variables and their operational definitions have been retained in their original form.

Observations were performed in those settings within the provider where the majority of the handicapped clients aged 21 and under spent their typical day. "Sections" refer to any locations within the provider where severely handicapped clients spent the majority of their waking hours, including wards, units, classrooms, recreation rooms, playgrounds, cafeterias, infirmaries and hospitals, etc.

Selection of Subjects within Settings

In an attempt to randomly select 3 children for each of the observation series, the following procedure was used: as the observer entered the observation setting, he/she selected the fifth client from his/her left, the third client from the right, and the client closest to the middle of the room, as the 3 subjects to be observed in that observation series.

Recording Observations

Observation samples were recorded for 5 minutes, followed by a rest period of 5 minutes, after which a new observation period began. During the observation period, the observer placed checks in the appropriate columns of the Observation Schedule as the behaviors and activities occurred. Check marks were scored on a 3-point basis: 1 check in a box indicated that the particular behavior or activity was observed only minimally (once or twice), 2 checks indicated that the behavior was moderately prevalent during the observation period (3 or 4 times), and 3 checks indicated that the behavior was highly prevalent during the observation period (5 times or more). During the 5-minute rest period which followed each observation, the observer reviewed the observations just coded to make sure that the scoring adequately reflected what was actually going on during the observation period.

Observation Coversheet

An Observation Coversheet was filled out for each series of observations conducted. The coversheet gathered global information about the observation setting including privacy of the setting, general activities occurring, staff-client ratio, grouping of clients, and availability of play and learning materials in the setting.

1.6 Quality

Construction of a model of "quality" for providers of services to severely handicapped children and youth was undertaken during Phase II of the study, simultaneous with instrument development. The quality model identifies 6 major service areas in which the characteristics of a provider are judged according to absolute standards of high, medium and low quality. The same quality standards have been used for all providers included in the study, with occasional provisions made for differences between day and residential facilities.

As with the construction of the entire quality model, decisions on the relative cutoffs and weights among the 6 major service areas was based upon the judgment and philosophy of the Abt Associates project directors in consultation with OPBE staff. The project directors wish to make clear that the quality model was constructed based upon an absolute rather than an empirical standard of what constitutes high, medium and low quality service for severely handicapped children and youth. Therefore, it is likely that some readers will disagree with various aspects of the model. We welcome the opportunity to discuss alternative strategies for model construction with any readers who desire to do so.

The 6 major service areas (or "aggregate" quality variables) which constitute the quality model differ in their relative importance and contribution to a provider's total quality score, as shown in Table Intro-1 following. The 6 aggregate variables were constructed using clusters of items drawn from the 4 major instruments used in the study. For a detailed discussion of the development of each aggregate variable, please refer to Volume 3, Severely Handicapped Children and Youth: Data Analysis and Results.

Table Intro-1

Aggregate Quality Variables
and their Corresponding Weights

Aggregate Variable	Weights
1. Educational and habilitative opportunities	21%
2. Staff-client interactions	21%
3. Parent involvement	14%
4. Humanization of Institutional setting	11%
5. Extent of training and evaluation	11%
6. Client movement	11%
Total:	100%

What follows are the basic definitions used for the aggregate and component quality variables in this study.

QUALITY VARIABLES AND SCORING SYSTEM

A. EDUCATIONAL/HABILITATIVE OPPORTUNITIES

1. Range of Educational/Habilitative Materials: Provider has available and accessible to severely handicapped clients a wide range of materials for educational, habilitative and recreational use. The materials are capable of stimulating a high degree of client development, are clean and in good repair, and are sufficient in number and variety for all clients.

Quality Criteria -- Low: few materials are available.
-- Medium: a range of different materials are available; they are at least in fair condition and of moderate quality; only available sometimes to clients.
-- High: a wide range of materials which are in at least good condition, of high quality, and are always accessible to severely handicapped clients.

2. High Percentage of Staff Time Spent on Educational/Habilitative Tasks: Staff spend a high percentage of their time providing direct services to clients aimed at improving their level of self-sufficiency and intellectual functioning. Specifically, staff spend a high percentage of time providing educational and instructional services, prevocational and vocational training, occupational therapy recreation, speech therapy, sensory awareness activities, music therapy, etc., to severely handicapped clients aged 21 and under.

Quality Criteria

Day
-- Low: provider staff spend no time or less than 10% of their time on educational/habilitative tasks.
-- Medium: staff spend at least 10% but less than 50% of their time on educational/habilitative tasks.
-- High: staff spend more than 50% of their time on educational/habilitative tasks.

Residential
-- Low: provider staff spend no time or less than 5% of their time on educational/habilitative tasks.
-- Medium: staff spend at least 5% but less than 25% of their time on educational/habilitative tasks.
-- High: staff spend more than 50% of their time on educational/habilitative tasks.

3. Amount of Client Time Spent on Educational/Habilitative Tasks: A high percentage of the severely handicapped clients' spent a large number of hours during the week in educational/habilitative activities.

Quality Criteria -- Low: less than 50% of the clients get any services at all and spend less than 10 hours a week in educational/habilitative activities.
-- Medium: between 50% and 75% of the clients spend between 10 and 29 hours a week in educational/habilitative activities.
-- High: more than 76% of the clients spend 30 hours or more a week in educational/habilitative activities.

B. STAFF-CLIENT INTERACTIONS

4. Warm Staff-Client Interactions: Staff encourages clients in their endeavors, demonstrates affection verbally or physically, and converses with clients.

   Quality Criteria -- Low: all three behaviors are absent or are present an average of less than once per observation series.
   -- Medium: the three behaviors are present at least once but less than twice per observation series.
   -- High: the three behaviors are present an average of at leat twice per observation series.

5. Instructive Staff Behaviors: Staff attempts to educate/habilitate clients through instructing them, offering them materials and playing with them.

   Quality Criteria -- Low: all three behaviors are absent or are present an average of less than once per observation series.
   -- Medium: the three behaviors are present at least once but less than twice per observation series.
   -- High: the three behaviors are present an average of at least twice per observation series.

C. PARENT INVOLVEMENT

6. Parent Involvement with the Provider: Provider involves parents in the development and operation of most or all of the aspects of the provider's operations including program planning, policy making, evaluation, fund raising, and as volunteers.

   Quality Criteria -- Low: no parent involvement.
   -- Medium: parent involvement in at least one activity.
   -- High: more than 25% of the parents are involved in at least 3 activities.

7. Parent Involvement with Their Child: Provider encourages families to visit their child and, where possible, to take their child home for periods of time; parents are involved with staff in discussions about their child, in parent education sessions, and in home visits.

Quality Criteria -- Low: no parents are involved in any activity; parents never visit their child; no home visits are made.
-- Medium: some parents are involved in activities with their child; in residential providers less than half the parents visit or take their child.
-- High: more than 25% of the parents are involved in activities at the provider; for residential providers over half visit their child and/or take their child home for visits.

D. HUMANIZATION OF INSTITUTIONAL SETTING

8. Respect for clients: Clients are viewed and treated in a normalizing, dignified way; they are viewed as human beings (not as clinical subjects, animals, or as children when adults); and they are not referred to using derogatory or disrespectful language. This criterion is measured by the presence or absence of talking about clients in their presence; using derogatory language; and physical aggression by staff to client.

Quality Criteria -- Low: presence of any of the negative behaviors.
-- High: absence of all the negative behaviors.

9. Privacy: Program respects the privacy of its individual clients as evidenced by private toileting and bathing areas.

Quality Criteria -- Low: no private toileting area.
-- Medium: somewhat private toileting area.
-- High: very private toileting area.

10. Non-Institutionalized Environment: Program has few, if any, institutional aspects, is very homelike (e.g. comfortable furniture, drapes, rugs, pictures, private or small bedrooms, private toileting areas, homelike routine to daily activities).

Quality Criteria -- Low: high level of institutionalization
-- Medium: moderate level of institutionalization
-- High: low level of institutionalization

11. Personal Possessions: Clients have well-fitting and appropriate clothing of their own; have personal possessions as well as a private place to keep them.

Quality Criteria

Day
-- Low: virtually all clients are partially or completely denuded or clients are dressed in ill-fitting or unclean clothes.
-- Medium: some clients are dressed appropriately, some are not.
-- High: virtually all clients are dressed appropriately.

Residential
-- Low: clients are partially or completely denuded and/or have no private possessions.
-- Medium: some clients are dressed appropriately, some are not; clients have few possessions, no private storage place.
-- High: clients are dressed appropriately, have possessions and a private place to store them.

12. Physical Comfort: Living and activity areas are well maintained and no unpleasant or noxious odors exist.

Quality Criteria -- Low: noxious odors and/or interior in poor repair.
-- Medium: antiseptic odor and moderate physical repair.
-- High: neutral odor and interior in excellent repair.

E. EXTENT OF TRAINING & EVALUATION

13. Evidence of Client Assessment: Evaluation findings/data have been systematically collected on client growth and development.

Quality Criteria -- Low: no client assessments made.
-- Medium: some client assessments, either in a few areas or only on a few clients
-- High: requires testings of at least 76% of the clients in at least 4 areas: ______, ______, ______, ______.

14. Evidence of Program Evaluation: Evaluations of the provider have been made in the last 5 years, particularly of the education/habilitation component.

Quality Criteria -- Low: no evaluations performed in last 5 years.
-- Medium: some evaluation of education/habilitative services is performed.
-- High: evaluations of education/habilitative services performed at least once a year.

15. **Staff Development Opportunities:** Provider offers extensive opportunities for staff to develop their capabilities through training programs (e.g., pre-service training; in-service training; course work paid for by provider).

Quality Criteria -- Low: no training opportunities for staff.
-- Medium: one type of training opportunity is available to staff.
-- High: at least two types of training opportunities are available to staff.

F. CLIENT MOVEMENT

16. **Evidence of Client Functional Level Improvement:** Clients were either released from the provider or moved to a different setting within the provider due to the fact that their functional level had improved.

Quality Criteria -- Low: no severely handicapped clients were discharged/moved because their functioning level improved.
-- Medium: between 1 and 10% of the severely handicapped clients were discharged because their functioning level improved.
-- High: 11% or more of the severely handicapped clients were discharged because their functioning level improved.

17. **Evidence of Movement of Severely Handicapped Clients Out of Provider into Less Sheltered Settings:** Provider has released a high percentage of its severely handicapped clients into less sheltered environments. These include natural, foster or adoptive homes or community residences.

Quality Criteria -- Low: no clients have been moved into less sheltered environments in the past year.
-- Medium: provider has released 1 to 10% of its total severely handicapped population to less sheltered settings.
-- High: provider has released more than 10% of its severely handicapped population to less sheltered settings.

18. **Evidence that Clients Receive Educational/Habilitative Services After Discharge from the Provider:** The provider has released clients into settings where they receive some form of educational and habilitative services.

Quality Criteria -- Low: less than 50% of the clients released are receiving educational or habilitative services.

-- Medium: between 50% and 74% of the clients released are receiving educational or habilitative services.

-- High: more than 75% of the clients released are receiving educational or habilitative services.

CHAPTER II

A CASE STUDY OF PROVIDERS OF SERVICES TO SEVERELY MENTALLY RETARDED CHILDREN AND YOUTH

1.0 SUMMARY

A total of 17 providers out of the 100 included in the study serve severely handicapped children and youth, aged 21 and under, a majority of whom are severely mentally retarded. Eleven of these providers are private nonprofit organizations and 6 are public facilities. Ten out of the 17 providers serve severely retarded clients on a day basis only, 3 provide only residential care, and 4 provide both day and residential services.

More severely handicapped clients are being admitted to the providers studied than are being discharged. Clients are discharged primarily because their level of functioning has improved, and they are placed in a wide range of institutional and community settings where most of them receive some educational and habilitative services.

The overwhelming majority of the providers offer a wide range of services to severely mentally retarded children and youth, with educational/habilitative services and basic care being the most prevalently offered as well as the services consuming the highest percent of staff time. Ninety-nine percent of the severely retarded clients aged 21 and under at the providers receive educational/habilitative services; the average amount received per client per week is 26 hours. A wide range of professional and paraprofessional staff provide educational/habilitative services. Behavior modification is the educational technique used most frequently to teach clients skills in the areas of communication, motor coordination and self-help.

Less than half of the providers were formally evaluated during the last 5 years. Those providers that are evaluated at all are reviewed at least once a year by state or provider staff. Providers perceive their major strengths to be in the areas of staff capability and parent/community involvement, and their major weakness to be lack of adequate funding. In the overwhelming majority of providers, clients' functional levels are assessed on a regular basis. A wide variety of standardized and provider-developed tests are used.

The most frequently employed staff are therapists, attendants, and teachers (certified and noncertified). Most staff are white women. The overwhelming majority of the providers offer some type of formal staff training.

In virtually all providers primarily serving severely mentally retarded clients, there is some form of parent involvement both with the provider and with the clients. The most frequent parent activity involves conferences with staff about the child being served. Most residential providers have flexible visiting rules and an average of more than half the clients receive monthly family visits; an average of more than one-third of the severely mentally retarded clients visit home regularly.

Most providers have a variety of community ties including activities for their severely handicapped clients, receipt of donated goods and services, and public relations efforts. Volunteers are used in many of the providers in a wide range of direct care capacities.

The most frequently reported changes in provider services and characteristics over the last 5 years have been in the areas of enrollment and staff size, funding sources, and educational services. Providers anticipate that the future will bring an increased demand for, and therefore expansion of, their services as a result of the new right-to-education legislation at the state level.

Most observations of severely retarded clients and the staff serving them took place in classroom settings. The conditions of these settings was, by and large, excellent. A wide range of activities were taking place in most of the settings and the average staff:child ratio was approximately 1:4.

The average annual per capita cost in providers serving severely mentally retarded clients was $4,513. An average of 76% of this cost is attributable to personnel expenditures. Within personnel expenditures, an average of 63% of the costs can be attributed to provision of direct care to clients, which constitutes an average of 41% of the total annual per *capita* costs. The most important funding source for the 17 providers was the state. The federal government and parent fees were other major funding sources.

Providers which serve a majority of severely mentally retarded children and youth, aged 21 and under, were generally of *high* quality on educational and habilitative opportunities and parent involvement in the provider; of *medium* quality on humanization of institutional setting and extent of training and evaluation; and of *low* quality on staff-client interactions and evidence of client movement. The major differences that emerged between day and residential providers were that, overall, *day providers are of higher quality, cost less per capita, and provide more educational and habilitative services.**

2.0 OVERVIEW

A total of 17 providers out of the 100 included in the study serve severely handicapped children and youth, aged 21 and under, a majority of whom are severely mentally retarded. Eleven of these providers are private nonprofit organizations and 6 are public facilities.

Ten of the 17 providers serve severely retarded clients aged 21 and under on a day basis *only*, while 3 providers are strictly residential and 4 provide both types of care for this client group. Two of the 17 providers serve clients in the client's home or foster home as well as at a central facility.

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*Note: two factors should be considered in comparisons of quality between day and residential providers:

(1) No attempt was made in this study to assess the comparability of the severely handicapped populations in day versus residential providers; therefore differences in quality may actually reflect differences in the needs and characteristics of the populations served; and

(2) Residential providers are concerned with provision of 24-hour care and are therefore different in scope and purpose from day providers, with a far heavier emphasis on basic care services.

Although the 17 providers serve a majority of clients whose primary disability is mental retardation, these providers also serve multiply-handicapped clients and a small group of emotionally disturbed clients, aged 21 and under.

The basic goal which the 17 providers hope to achieve with severely handicapped clients is to prepare individuals for life within a social structure, be it a natural home, a community residence or an institution. Stimulatory and developmental objectives are emphasized in many providers for the development of clients' fine and gross motor coordination, language skills, and personal/social skills. Some providers aim to increase the functional level of the severely retarded client population, while others appear to be concerned with community education for the purpose of changing attitudes and preparing a framework of social acceptance for clients who will return to the community to live and work.

The 17 providers which primarily serve severely retarded clients are fairly evenly distributed across states with the largest concentration of providers on the east coast (10). The facilities are situated in both rural (41%), suburban (35%), as well as urban (24%) areas.

3.0 CHARACTERISITCS OF PROVIDERS

3.1 Client Characteristics

In 70% of the providers* serving severely retarded clients, there are no mandated age limits for admittance. The average age of admittance of the youngest group of clients is approximately 7 months; the average age of the oldest clients admitted is 10 years. Currently, the age range of severely handicapped clients presently being served at the 17 facilities is between 0 and 28 years.

The distribution of clients by ethnicity is as follows:

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*Note: when the term "providers" is used throughout this case study, the referent is the 17 providers which serve a majority of severely mentally retarded clients, aged 21 and under.

Table MR-1

Ethnic Distribution of Clients

Ethnic origin	Average % of provider population	Range
White	77%	4-100%
Black	20%	0- 96%
Spanish surname	3%	0- 17%
American Indian	0%	---
Oriental	0%	---
Other	0.8%	0- 6%

In most cases, a little over half the population is male (66% average) with a range of from 40% to 100%. The female population accounts for an average of approximately 34% with a range from 0% to 60%.

The estimates of time needed for clients to reach self-sufficiency in toileting, dressing and self-feeding skills varies considerably between day and residential providers. It is estimated by staff that residential clients could reach self-sufficiency in an average of 7 years, 4 months; whereas day providers estimate an average of 1 year, 4 months for a client to become self-sufficient.

The average length of stay for clients in residential providers is 42 months; the average stay for clients in day providers is 57 months.

3.2 Enrollment

3.2.1 Admission

Many providers which primarily serve severely mentally retarded children and youth are mandated to serve clients of particular ages, types of disabilities, and levels of severity. The most frequent mandates reported by providers are to serve mentally retarded clients (86% of the providers), severely handicapped clients (44%) and moderately handicapped clients (64%). The average number of persons applying for admission to these providers from July, 1973 to May, 1974 was 39, with a range from 3 to 270 applicants across the total group. The acceptance rate was approximately 72% across the 17 providers or 4% of currently enrolled severely handicapped children and youth.

Criteria for admission to providers include a requirement that clients be eligible for funding or financial support of some kind. In many cases admission is limited to a certain geographical area and often only those clients who cannot be served in a public school are accepted. One provider insists on parental involvement and another considers parental "hardship" in deciding on enrollment. Some providers require that clients must be ambulatory, toilet-trained, able to function in a group and able to return home on scheduled visits. Legally blind and legally deaf clients are sometimes excluded as are those who are "too disruptive."

Only 2 of the 17 providers currently maintain a waiting list for their services. These providers, which are residential, have an average number of 6 persons on the waiting list, and an average waiting period of 6 months. Only 1 provider has a minimum and maximum length of enrollment for clients (12 months minimum; 24 years maximum).

Given their current resources, 50% of the providers feel that they could serve more clients (on the average 8 more clients); 40% feel that they are currently operating at full capacity; and 10% feel that they should be serving fewer clients.

3.2.2 Discharge

In 12% of the providers, no clients were discharged between July, 1973 and May, 1974. An average of 13 clients were discharged, across providers. The reason most frequently cited by providers for discharging clients is that the client's level of functioning improved or the client no longer needed the services offered by the provider. Other reasons cited are that the client had reached maximum age, had stayed in the program for the maximum time limit, or had died.

In providers offering only day services, the majority of the discharged clients were placed or remained in their families' homes (73%). The largest group of clients discharged from residential providers were placed in other institutions (36%). An average of 25% of the discharged clients from residential providers were placed in group homes. Clients were also released to foster homes. No residential providers discharged clients to nursing homes between July, 1973 and May, 1974.

Of the clients who have been discharged, 63% from day providers and 88% from residential providers are currently receiving educational or habilitative services. The majority of these clients are receiving these services in local public or private schools or specialized day programs.

3.3 Services Offered to Severely Handicapped Children and Youth*

The overwhelming majority of the 17 providers which primarily serve retarded children and youth offer a wide range of service components to this client group. Table MR-2 displays the type of service provided, the percent of providers which offer the service and the average percent of staff time spent in providing the service to severely mentally retarded clients.

As reported in providers serving severely mentally retarded clients, staff spend the greatest portion of their time providing educational/habilitative services and basic care services to this client group.

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*Note: for a description of the 7 service components and the 12 staff categories used in the study, see pages 4-7 of the Introduction to this volume.

Table MR-2

Services Offered to Severely Handicapped Clients

Service component	Percent of providers offering the component			Average staff time spent providing the service		
	Total n=17	Day n=10	Residential n=7	Total n=17	Day n=10	Residential n=7
Basic care	88%	90%	86%	25%	12%	44%
Educational/habilitative services	100%	100%	100%	48%	65%	24%
Medical services	35%	50%	14%	2%	2%	2%
Family and community services	77%	90%	57%	5%	6%	3%
Diagnostic and referral services	65%	80%	43%	3%	3%	3%
Administration	65%	80%	43%	7%	10%	4%
Support services	82%	80%	86%	11%	4%	11%

There were no differences in the types of services offered to this group in day, as opposed to residential, providers. However, the percent of providers offering each service and the average percent of staff time spent on various service components differed considerably. A greater percent of day providers offer the full range of service components than do residential providers. In providers offering only day services, staff reportedly spend more than twice as much of their time on educational/habilitative services as do staff in residential providers; one-third as much time on basic care services and one-fifth as much time on support services. Some of this variability in staff time allocation in day versus residential providers is, of course, attributable to the fact that residential providers offer 24-hour, 7 days per week, whereas day providers operate for less than one-third of this time period.

3.3.1 Educational and habilitative services offered to severely handicapped children and youth

All of the 17 providers which primarily serve severely retarded clients offer educational and habilitative services. On the average, each of the clients receives 26 hours per week of education and/or habilitation.

These services are delivered by a variety of professionals, as follows:

Table MR-3

Percent of Educational/Habilitative
Services Delivered by Staff

Staff Category	Percent of educational/ habilitative services delivered		
	Total n=17	Day n=10	Residential n=7
Teacher (certified)	40%	49%	22%
Teacher (noncertified, aide)	36%	39%	29%
Attendant	8%	1%	23%
Nurse	.2%	0%	1%
Therapist	11%	8%	19%
Social worker	2%	3%	0%
Psychologist	0%	0%	0%
Psychiatrist	0%	0%	0%
Medical doctor	0%	0%	0%
Administrator	0%	0%	0%
Support staff	0%	.1%	0%
Other staff	2%	.3%	5%

Therefore, as reported in providers serving severely mentally retarded clients, teachers and teacher aides are the professionals who deliver most of the educational/habilitative services, with therapists making a substantial contribution.

No differences in the percent of severely mentally retarded clients served or the amount of time each client receives educational/habilitative services are reported in day, as opposed to residential, providers. However, teachers and teacher aides deliver a much higher percentage of the educational/habilitative services in day providers (88%) than in residential providers (51%). Among residential providers, attendants deliver about 3 times as much of the educational/habilitative services as they do in day providers; therapists also deliver more of these services in residential providers than in day providers.

The most common educational/habilitative objective across the 17 providers serving severely retarded clients is concerned with improving client functioning in a variety of skill areas including communication, motor, self-help and social skills. Instruction in communication and motor skills are offered most frequently by the providers. Table MR-4 displays the types of skills training offered to severely retarded clients.

In day providers, training in communication, self-help skills and sensory awareness are provided most often, while residential providers most often provide training in social skills and motor skills. Offered least by day providers is training in social skills and behavior management, while residential providers offer music and art therapy and prevocational instruction least often.

The educational techniques used by providers to achieve their educational/habilitative objectives are quite varied. As is evident from Table MR-5, behavior modification is used in 14 of the 17 providers to teach severely retarded children a variety of functional skills.

Table MR-4

Skills Training Offered to Severely Handicapped Clients

Instructional area	Number of providers offering skill training (n=17)
Communication skills	10
Motor skills	8
Self-help skills	7
Prevocational Skills	6
Pre-academic skills	6
Sensory awareness	5
Social skills	5
Academic skills	5
Independent living skills	4
Music and art therapy	4
Recreation skills	4
Behavior management (control of inappropriate behavior)	3

Numerous instructional and recreational activities are offered to severely retarded clients at the 17 providers including field trips to community areas (12 providers), swimming (6), bowling (7) and movies (5). One provider offers a scouting program, another offers a foster grandparent group and a day camp for their clients. Physical education and physical therapy are offered by 50% of the providers. Masking and patterning (Doman-Delcato Method) as well as creative movement classes and mobility training are offered to severely retarded clients in a number of facilities. Another provider offers travel training and home living skills instruction.

There are no discernible differences in the types of educational/habilitative activities offered in day, as opposed to residential providers.

Table MR-5

Educational/Habilitative Techniques
Used by Providers

Educational/habilitative technique	Number of providers using technique (n=17)
Behavior modification	14
Modelling	5
Precision teaching	4
Physical contact	3
Physical therapy	3
Individual attention	3
Reality therapy	1
Repetition	1

3.3.2 Staff perceptions of resources available to clients

3.3.2.1 Materials. The overwhelming majority of the 17 providers serving mentally retarded clients provide a wide range of materials to that client group. Materials most frequently available are toys, games, large motor equipment, and writing and drawing materials. Materials least frequently available to the severely retarded clients at the 17 providers are plants and animals.

As reported by the 17 providers sampled, materials most often available in sufficient quantity for all severely handicapped clients to work with are writing and drawing materials and building materials. Materials least often available in sufficient quantity are animals and large motor equipment. Materials most accessible to severely mentally retarded clients at all times are plants and building materials. Materials least accessible (e.g., only during special activities) are musical instruments and toys.

3.3.2.2 Possessions. The majority (86% or 6 providers) of the 7 residential providers serving severely mentally retarded clients report that these clients have their own clothing which is always returned to them following laundering.

Members of this client group also possess other personal articles (such as radios, stuffed animals, toys, etc.) in 93% of the residential providers sampled. Ninety-two percent of the residential providers report that severely mentally retarded clients have private storage areas available to them for storing personal articles.

3.3.2.3 Work opportunities for clients. Almost half of the 17 providers serving severely mentally retarded clients offer those clients the opportunity to earn money or credits. Severely mentally retarded clients acquire money and credits by performing a number of tasks as shown in Table MR-6; money and/or credits are earned primarily for tasks performed in a sheltered workshop, as well as housekeeping and janitorial tasks. Severely mentally retarded clients who earn money do so most often in sheltered workshops; clients earning credits do so most often by performing housekeeping tasks.

No differences in the types of tasks performed by this client group to earn money or credits are reported in day, as opposed to residential, providers.

3.4 Evaluation

3.4.1 Evaluation of provider services

Formal evaluations of service components were made during the past 5 years in 8 of the 17 providers which primarily service severely mentally retarded clients. Each of these 8 providers is evaluated regularly (at least annually), usually by state education agencies and/or by internal staff. All are evaluated in the areas of basic care, educational and habilitative services, and family and community services.

Table MR-6

Work Performed by Severely Handicapped Clients for Money or Credits

Type of work performed by client	No. of providers where money is earned		No. of providers where credits are earned	
	Day n=10	Residential n=7	Day n=10	Residential n=7
Sheltered workshop	1	1	1	3
Janitorial	1	1	2	1
Care of other clients	1	-	1	1
Food service	-	1	1	2
Laundry	-	1	-	-
Housekeeping	-	3	1	2
Clerical	1	-	1	-
Good behavior	1	-	3	2
Academic work	1	-	2	2

Evaluation results are most frequently used by providers themselves for program development, setting of behavioral goals for clients, and policy making, and often they are used by agencies as a basis for accrediting or licensing the providers.

The findings of evaluations made between November, 1973 and May, 1974 on the educational and habilitative services of these providers were generally supportive, but in most cases pointed out deficiencies in the areas of curriculum and program development (e.g., a need for more individualized programming, or a need for definition and coordination of parent, child and provider objectives).

Directors of these providers serving severely retarded clients perceive the major strengths of their programs as being centered on 2 areas: staff capability (well-trained and dedicated personnel), and parent/community involvement (active parent groups, strong volunteer programs). The major weakness of most providers as perceived by the directors is a lack of adequate funding and its attendant problems (insufficient numbers of staff and shortage of materials, needs for specialized services and additional facilities). In a number of cases, efforts are being made to overcome funding difficulties by working more closely with local and state officials and by attempting to become more self-sufficient through provision of workshops and services to the community.

3.4.2 Client assessment

In 94% of the providers, severely mentally retarded clients aged 21 and under are formally assessed on a regular basis to determine their level of functioning and progress. The areas of client assessment and the ranges and mean percentages of clients assessed across sites are displayed in Table MR- 7 .

Table MR- 7

Client Assessment

Assessment area	Mean % of clients assessed	Range of clients assessed
Self sufficiency	96%	57%-100%
Communication	92%	19%-100%
Social and/or emotional competence	88%	0%-100%
Intelligence	82%	0%-100%
Motor development	66%	0%-100%

About half of the providers use the same procedures for measuring progress of all clients assessed; procedures vary according to client needs in the remainder. Assessment procedures used most frequently include administration of a variety of standardized tests (Stanford-Binet, Weschler Intelligence Scale for Children [WISC], the Vineland Social Maturity Scale, and the Peabody were frequently mentioned) as well as staff reviews and progress reports. Assessment instruments specially developed by provider staff and program specialists are used in nearly one-quarter of the providers.

Assessment results are used in 69% of the providers to measure client progress and to assist in developing instructional programs for clients; 50% of the providers use results to evaluate program components and teaching techniques and to group clients within the provider; 38% of the providers use results to determine client placement upon release.

3.5 Provider Staff Characteristics

Per capita figures for the average number of full-time equivalent staff (F.T.E. staff, based on a 40-hour work week) within the 17 providers who work with clients who are severely retarded and aged 21 and under are shown in Table MR-8.*

The total weekly overtime hours worked across providers ranges from 2 to 67, with an average of 17 overtime hours per week. In 8 providers, teachers and teacher aides work the greatest amount of overtime; administrators and support staff work the greatesttamount of overtime in 4 providers.

An average of 93% of staff in day providers are women, as opposed to an average of 68% women among residential providers. Across all 17 providers, the percentage of women staff members ranges from 32% to 100%. Average nonwhite staff across providers is 26%, with a range from 0% to 84% nonwhite staff members.

Eighty-eight percent of the facilities provide formal training to their staff members. In 60% of the day providers and 43% of the

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*Among day providers, the highest ratio of staff to clients is in the certified teacher category (1:6), followed by noncertified teacher (1:10). Among residential providers, the highest staff:client ratio is in the attendant category (1:3). All other staff:client ratios fall below the (1:10) level.

Table MR-8

Average Full-Time Equivalent Staff Per Client

Staff category	Average full-time equivalent staff per client		
	Total n=17	Day n=10	Residential n=7
Teacher (certified)	.11	.16	.03
Teacher (noncertified, aide)	.07	.10	.04
Attendant	.15	.03	.33
Nurse	.01	.003	.02
Therapist	.02	.01	.03
Social worker	.02	.02	.01
Psychologist	.001	.001	-0-
Psychiatrist	-0-	-0-	-0-
Medical doctor	-0-	-0-	.001
Administrator	.08	.09	.07
Support staff	.08	.08	.09

residential providers, pre-service training is administered primarily for orientation purposes. Ninety percent of the day providers and 71% of the residential providers sponsor in-service training to develop staff proficiency in skills and techniques involved in serving clients. Funding for course work is available for staff in 70% of the day providers and 29% of the residential providers as a means of fostering professional improvement and enhancing staff career goals.

3.6 Parent Participation and Community Involvement in the Providers

3.6.1 Parent participation

There is some degree of parent involvement in 88% of the providers serving mentally retarded clients. According to directors, parent activity most often takes the form of discussions with staff about their child (64% of parents participate in this activity across providers) and participation in parent education sessions (45% of parents). Substantial numbers of parents (42% average) also participate in parent groups, and an average of 35% assist in the development of instructional programs for their child.

Staff estimates of parent participation in the planning and delivery of services to their child average approximately 46%. Only 13% of the staff interviewed feel that parent involvement has no impact on a child's progress, while 53% feel that the impact is moderate and 33% feel that parent involvement results in major improvement in a child's progress. Comparisons of parent involvement in day versus residential providers is shown (by mean percentages) in Figure MR-1.

Seventy-one percent of the residential providers serving mentally retarded clients have a visiting policy which allows parents to visit their child at any time; only one provider adheres to visiting hours and one allows parents to visit only on special occasions. An average of 53% of the clients in these providers receive family visits at least once a month, and an average of 18% are never visited by their families. Although public transportation is available to and from 43% of the residential providers at least once an hour, responses from all providers indicate that parents use private cars as the major means of transportation for visiting their child.

A mean of 39% of the clients are taken home at least once a month, 38% are taken home less than once a month, and an average of 7% never make home visits. Few providers presently make concrete efforts to encourage families to take their child home.

3.6.2 Community involvement

Severely mentally retarded clients in 94% of the providers have opportunities to interact with nonhandicapped adults and peers both at provider facilities and in the surrounding community. Most nonhandicapped visitors and volunteers come to the providers through churches, big brother/sister programs, foster grandparents, schools and civic groups. Field

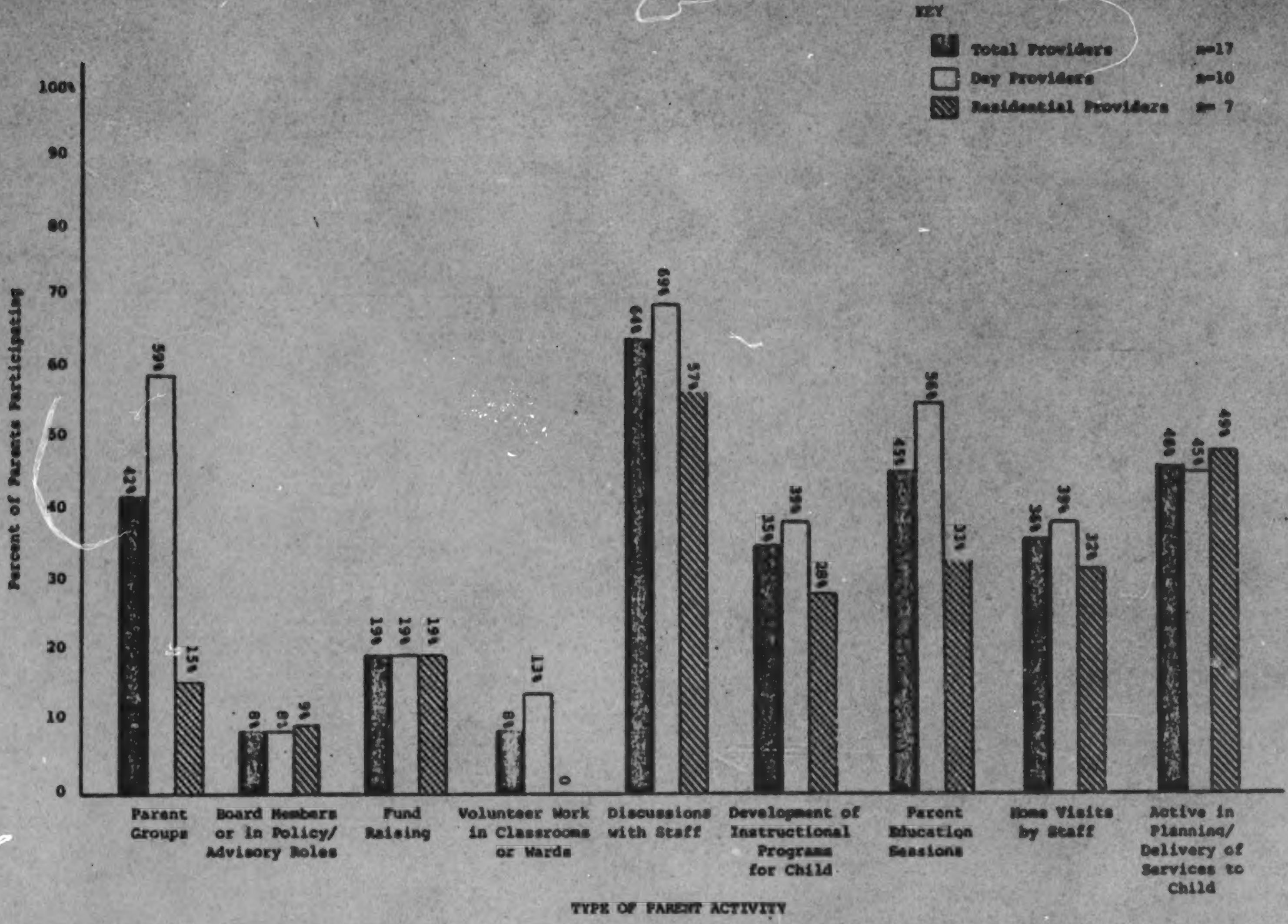

FIGURE MR-1

EXTENT OF PARENT INVOLVEMENT
IN PROVIDERS SERVING SEVERELY MENTALLY RETARDED CHILDREN AND YOUTH

trips to restaurants and shopping centers, outings to recreational facilities (for swimming, bowling, roller skating) and movies, and attendance at special community events (ball games, fairs, concerts) are frequently mentioned as client activities in the community surrounding the provider.

Goods and services are donated to 65% of the providers. Goods donated include building materials, special equipment, toys and games, food, land, and summer camp facilities. Some of the services contributed include public relations work, consulting services, carpentry and transportation. Virtually all providers make efforts to attract community interest, largely through public information programs (TV documentaries, films and slides, news releases, speaking engagements, tours) and through specific activities (fairs, flea markets).

Ninety percent of the day providers and 43% of the residential providers have regular volunteer workers who work a total weekly average of from .117 to 75 hours per client, with a mean total of 9.1 hours of work per client per week.* Direct care tasks performed by volunteers are mostly in the areas of basic care, instruction and field trip supervision; support tasks include clerical work, building maintenance and sewing. Providers with colleges nearby have access to more professional volunteers in the areas of teaching, psychology, social work, speech and music therapy.

3.7 Changes in Provider Services

Most directors of providers serving severely retarded clients indicate that there has been significant change over the past 5 years in 8 of 15 areas of provider characteristics and services. In most providers, characteristics of clients (ages, sex, types and severity levels of handicaps) have remained relatively stable, while the numbers of clients served and the characteristics of the providers themselves have changed. Over 75% of the respondents report change in their enrollment size (decreases in 5 providers, increases in 7), funding sources

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*Note: In day providers volunteers work an average of 11.3 hours per client per week; among residential providers in this group, volunteers work 2.4 hours per client per week.

(less private, more federal support), the number of staff employed (increases in total staff), and the educational approaches and materials utilized (use of behavior modification, introduction of vocational and life-skill programs, more and better materials, greater accountability for the education of clients). Stability is reported by over 75% of the directors interviewed in the average length of client enrollment, the criteria for discharging clients, and the type of client living arrangements.

Providers offering only day services differ notably from those providers offering residential services in terms of changes over the past 5 years. Day providers indicated change much more frequently than residential providers in 7 areas: enrollment size (up in 5 day providers, down in 3); enrollment capacity (greater in 5, smaller in 1); severity levels of handicaps served (more severe); ages of clients served (wider range in 3, narrower in 1); physical size of the facility (enlarged in most cases); philosophical orientation; and range of services offered (addition of services in all 7 day providers indicating change). The only characteristics which changed more frequently in residential providers than in day providers are policy control and management (changes in personnel, tighter internal control), and funding source/level (less private, more state and federal support).

Future changes anticipated by many of the directors are: expanded facilities, higher enrollment, increased staff, and an expanded range of services being offered to clients of wider age and handicap groups. Directors of 56% of the day providers and 83% of the residential providers stated that additional facilities would be needed if their client population were to increase by 25%.

Eighty-eight percent of the directors feel that recent federal and state legislation will affect their programs. Mention was made most often of state right-to-education laws; these are expected to result in a higher concentration of the more severely mentally retarded in providers and to necessitate a wider range of services provided.

4.0 OBSERVATIONS OF SEVERELY HANDICAPPED CHILDREN AND YOUTH AND THE STAFF SERVING THEM*

4.1 Description of Settings Observed

A total of 603 time-sampled observations were taken in various settings in the 17 providers which primarily service severely retarded children. The most frequently observed settings were classrooms (52% of the observations) and living rooms or day halls (10% of the observations). Other settings in order of frequency were: outside areas such as playgrounds; auditoriums and gyms; bedrooms and bathrooms; workshops; dining areas; therapy areas; and wards.

The condition of the interiors of these settings was excellent in the majority of observations (79%). The odor of the setting was neutral in 87% of the cases, and in only 6% of the settings was there a noxious odor. In those settings with sleeping accommodations, 15% were very private, 46% were somewhat private, and 39% were not private. Toileting areas tended to be more private than sleeping accommodations, with 73% being very private, 4% somewhat private, and 23% not private. A low level of institutionalization (i.e., a homelike as opposed to a sterile living environment) was observed in the majority of observations (56%), a moderate level in 32% of the observations, and a high level in 12%.

There were several differences between the day and residential providers in terms of the settings observed. Day providers were less institutionalized than residential providers. Very private toileting areas were more frequently observed in day providers than in residential providers. Odors were less antiseptic and noxious in day providers than in residential providers. However, the condition of the interior of the buildings was generally better in residential providers than in day providers.

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*Note: for a description of observation procedures used in the study and operational definitions of items on the Observation Schedule, see pages 8-10 of the Introduction to this volume.

4.2 Description of Activities Observed

Educational and recreational activities were the most frequently observed activities in the settings where the majority of severely retarded clients spent their typical day. Table MR-9 lists the types of activities which were observed and the corresponding percent of the total observations in which they occurred.

Table MR-9

Types of Activities Observed

Type of activity	Frequency of occurrence (Percent of total observations)
Educational	25%
Recreational	19%
Mealtime, snacktime	13%
Free play	11%
No organized activities	10%
Naptime	7%
Vocational	6%
Self-care	4%
Therapy	3%
Basic care	2%

The general activity level of clients was high in 21% of the observations, moderate in 48% and low in 31%. Behavior modification took place in 29% of the observations. In the majority of observations, an adequate number of high quality play and learning materials were available and were in excellent condition.

In 80% of the observations of severely mentally retarded clients, male and female clients were grouped together in various settings.

Severely handicapped clients were grouped homogeneously with clients of similar levels of disability in 68% of the observations. The average number of clients in a setting was 10, with a range of from 1 to 48 clients. The average number of staff per setting was 3, with a range of from 0 to 16 staff. In 5% of the observations, no staff were present in the setting; this condition occurred twice as frequently in residential providers as in day providers. In those settings where staff were present, the average staff:client ratio was 1:4, although the range was from a high of 3:1 to a low of 1:23.

In terms of activities observed, day and residential providers differ in many respects. For example, educational activities were 1.5 times more frequently observed and vocational activities were 9 times more frequently observed in day providers as opposed to residential providers. No organized activities were noted in only 3% of the observations taken in day providers, whereas in residential providers, no organized activities were noted in 22% of the observations.

High activity levels were twice as frequent in day providers and behavior modification was observed 1.5 times as often. Play materials were more adequate, in better condition and of higher quality in day providers than in residential providers. No play materials were available in less than 1% of the day provider observations, whereas in residential providers no play materials were noted in 11% of the observations.

4.3 Description of Clients and Staff Observed

Six hundred three systematic observations in 200 settings within the 17 providers which primarily serve severely retarded clients indicated that there were 7 distinct types of behaviors taking place between clients (peer to peer) and between clients and staff, including:

(1) "Inner-directed" behaviors on the part of clients -- clients acted without observable external cause or interaction with their environments;

(2) Brief staff-client interactions;

(3) Sustained staff-client interactions;

(4) Interactions between clients and staff during instructional activities;

(5) Interactions between clients (peer to peer) and clients and staff during play activities;

(6) Peer to peer interactions; and

(7) Negative affect on the part of clients -- aggressive behavior.

As is evident from Figure MR-2, there were differences observed in the types of behaviors presented in day, as opposed to residential, providers. Average to extremely high amounts of "inner-directed" behaviors were observed almost twice as frequently in the residential providers. Whereas 90% of the day providers showed average amounts of sustained staff-client interactions, there was considerable variability among the residential providers on this dimension; over 70% of residential providers fell into the average category and the remainder showed either very high or very low amounts of this type of behavior.

The day providers also showed considerably more staff-client interaction than did residential providers during instructional activities. When interactions during play activities were observed, all of the residential providers fell into the average category. The day providers were much more variable; 80% were in either the above average or average category, and 20% were slightly below average.

Observations of negative affect and aggressive behaviors showed that the clients in residential providers were twice as likely as those in day providers to exhibit above average amounts of these types of behaviors.

5.0 QUALITY OF PROVIDERS OF SERVICES TO SEVERELY HANDICAPPED CHILDREN AND YOUTH*

5.1 Quality of Educational and Habilitative Opportunities

The quality of educational and habilitative opportunities was high in 70% of the providers primarily serving severely mentally retarded children and youth, medium in 18%, and low in 12% of the providers. This quality indicator is based on 3 component variables:

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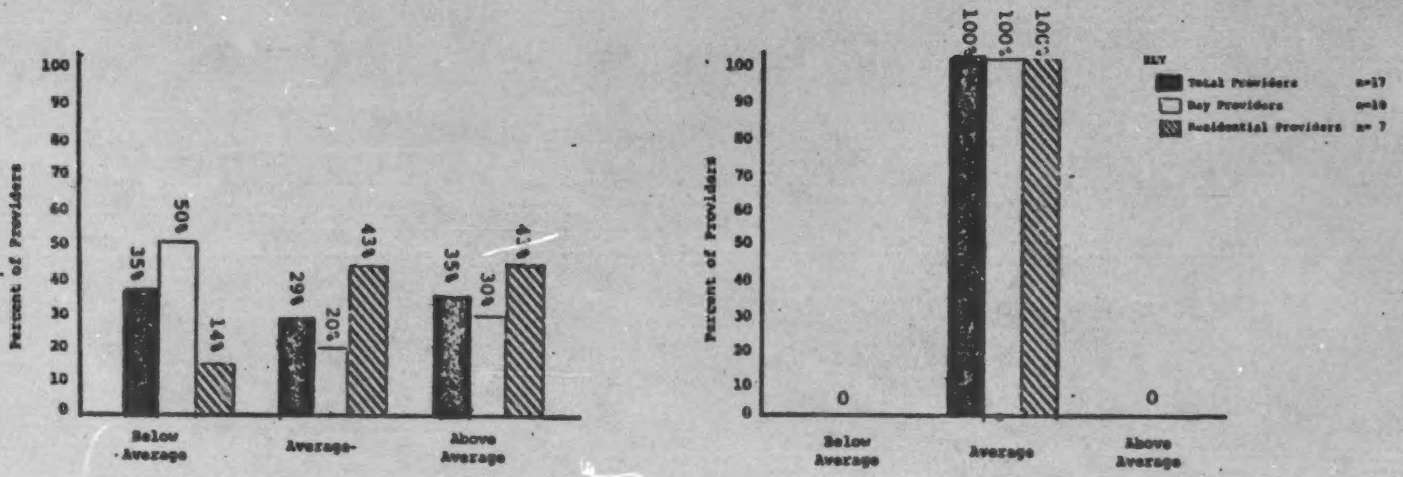
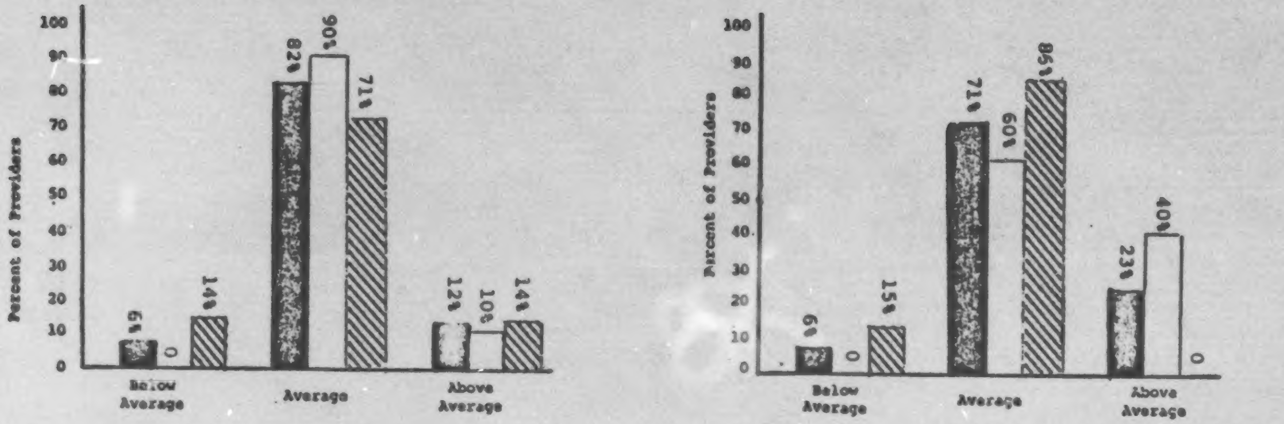
*Note: for a description of the quality model constructed for this study, see pages 10-17 of the Introduction to this volume.



"Inner-Directed" Behaviors

Brief Staff-Client Interactions

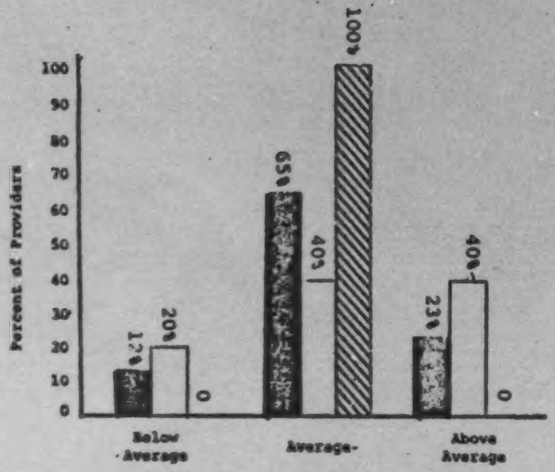


Sustained Staff-Client Interactions

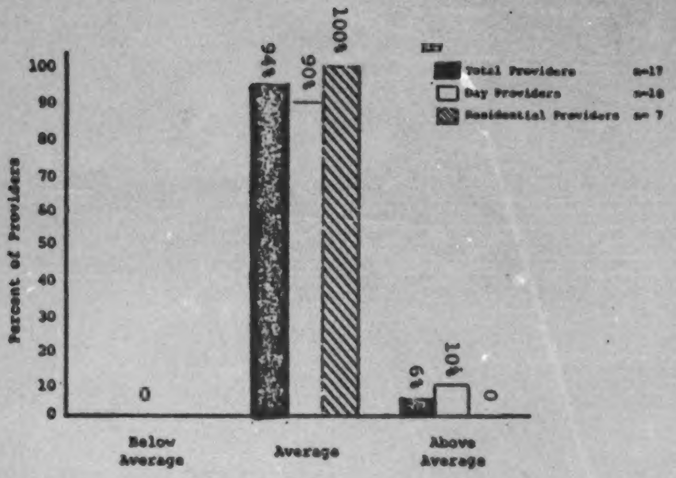
Staff-Client Interactions During Instructions

FIGURE MR-2

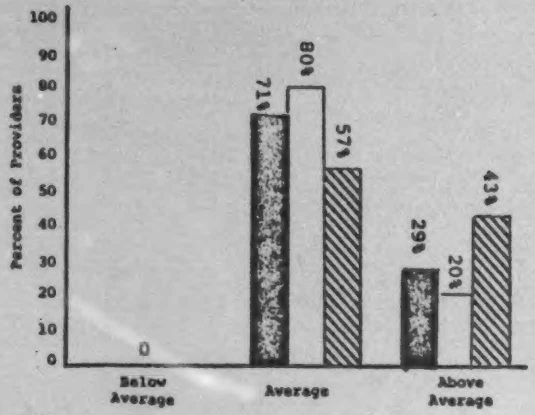
PREVALENCE OF SEVEN BEHAVIOR TYPES
IN PROVIDERS SERVING SEVERELY MENTALLY RETARDED CHILDREN AND YOUTH



Interactions During Play Activities



Peer-Peer Interactions



Negative Affect--Aggressive Behaviors

FIGURE MR-2 (CONTINUED)

PREVALENCE OF SEVEN BEHAVIOR TYPES
IN PROVIDERS SERVING SEVERELY MENTALLY RETARDED CHILDREN AND YOUTH

(1) The range of educational and habilitative materials available to clients;

(2) The percent of staff time spent on educational and habilitative services; and

(3) The amount of client time spent on educational and habilitative activities.

The day providers scored higher than the residential providers on each of these component variables, particularly on the amount of client time spent on educational and habilitative activities.*

Figure MR-3 displays the distribution of day, residential and total providers on the overall quality of educational and habilitative opportunities and on the 3 component variables.

5.2 Quality of Staff-Client Interactions

The quality of staff-client interactions was medium in 18% of the providers, and low in 82% of the providers. None of the providers were of high quality on this variable which combines the component variables of:

(1) Warm staff-client interactions; and

(2) Instructive staff behaviors toward clients.

Day providers were of higher quality than the residential providers on both of these component variables.

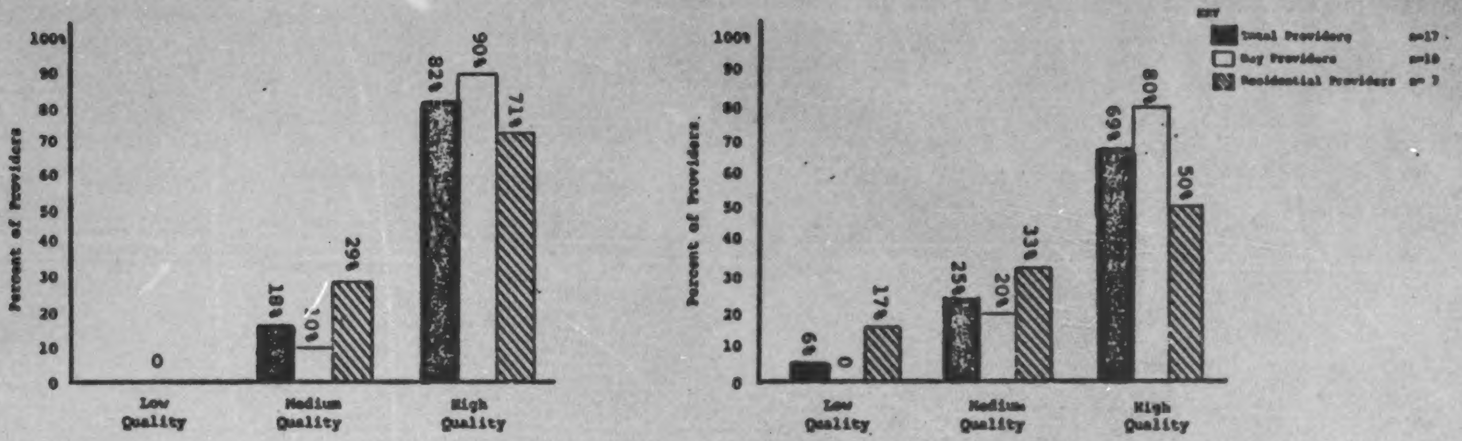
Figure MR-4 displays the distribution of day, residential and total providers on the overall quality of staff-client interactions and on the 2 component variables.

---

*Note: two factors should be considered in comparisons of quality between day and residential providers:

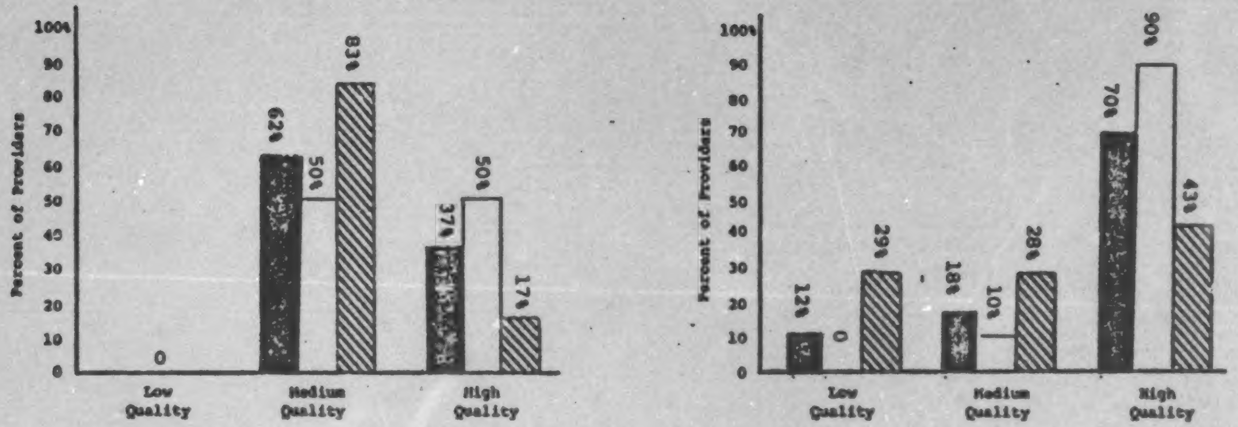
(1) No attempt was made in this study to assess the comparability of the severely handicapped populations in day versus residential providers, therefore differences in quality may actually reflect differences in the needs and characteristics of the populations served; and

(2) Residential providers are concerned with provision of 24-hour care and are therefore different in scope and purpose from day providers, with a far heavier emphasis on basic care services.



Availability of Educational Materials

Percent of Staff Time Spent on Educational/Habilitative Services

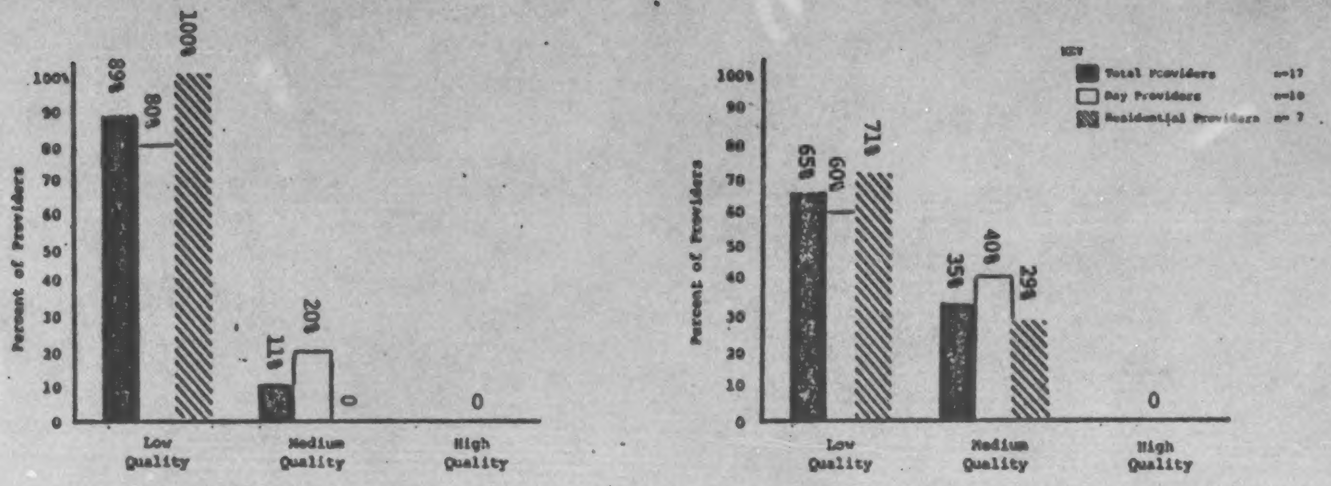


Amount of Client Time Spent on Educational/Habilitative Activities

AGGREGATE
Educational and Habilitative Opportunities

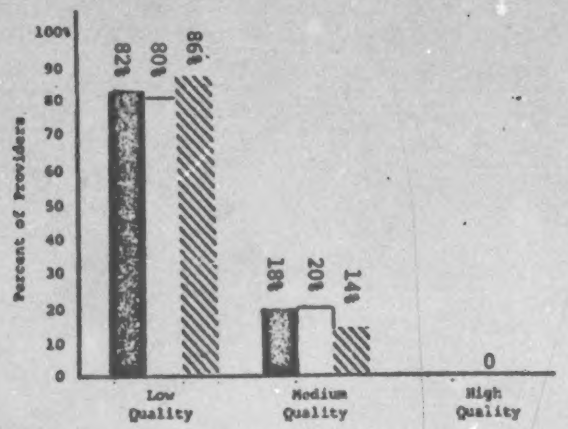
FIGURE MR-3

QUALITY OF EDUCATIONAL AND HABILITATIVE OPPORTUNITIES
IN PROVIDERS SERVING SEVERELY MENTALLY RETARDED CHILDREN AND YOUTH



Warm Staff-Client Interactions

Instructive Staff Behaviors



AGGREGATE

Staff-Client Interactions

FIGURE MR-4

QUALITY OF STAFF-CLIENT INTERACTIONS
IN PROVIDERS SERVING SEVERELY MENTALLY RETARDED CHILDREN AND YOUTH

5.3 Quality of Parent Involvement

The quality of parent involvement was high in 53% of the providers which serve a majority of severely mentally retarded children and youth, medium in 35%, and low in 12% of the providers. This aggregate quality variable measures:

(1) The extent of parent involvement in the planning and operations of the provider; and

(2) The extent of parent involvement with handicapped clients.

Day providers were of higher quality than residential providers in terms of both of these component variables, particularly on parent involvement in the provider.

Figure MR-5 displays the distribution of day, residential and total providers on the overall quality of parent involvement and on the 2 component variables.

5.4 Quality of Humanization of Institutional Setting

The quality of humanization was high in 18% of the providers and medium in 82% of the providers. The humanization of providers was measured by 5 component variables:

(1) Provider's respect for clients;

(2) Clients' privacy;

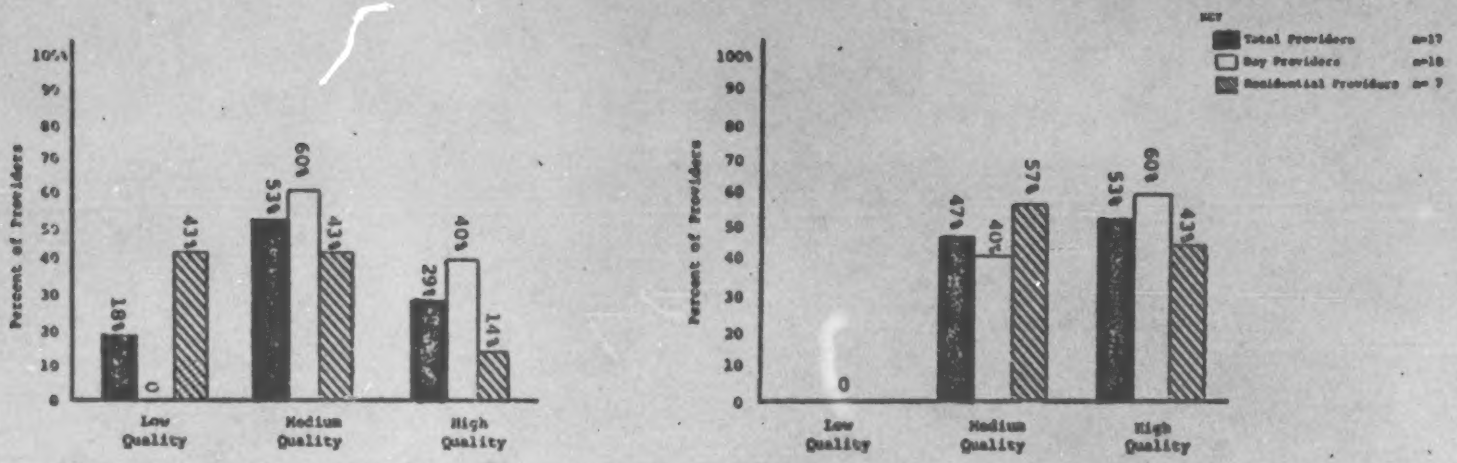
(3) Noninstitutionalized environment;

(4) Provider's policies regarding personal possessions of clients; and

(5) The physical comfort of the provider.

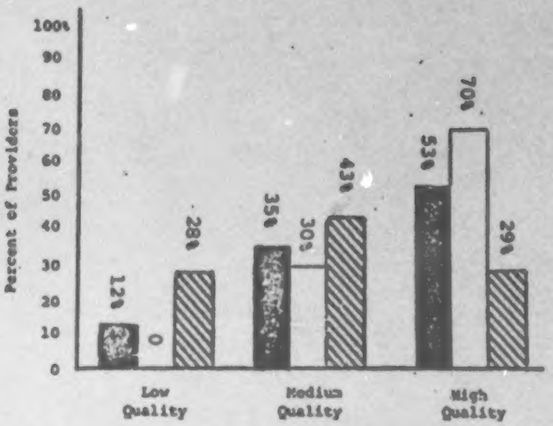
With the exception of physical comfort, day providers scored higher than residential providers on these component variables. The most striking differences between day and residential providers were on the variables of respect for clients and client privacy.

Figure MR-6 shows the distribution of day, residential and total providers on the overall quality of humanization and on each of the 5 component variables.



Extent of Parent Involvement with Provider

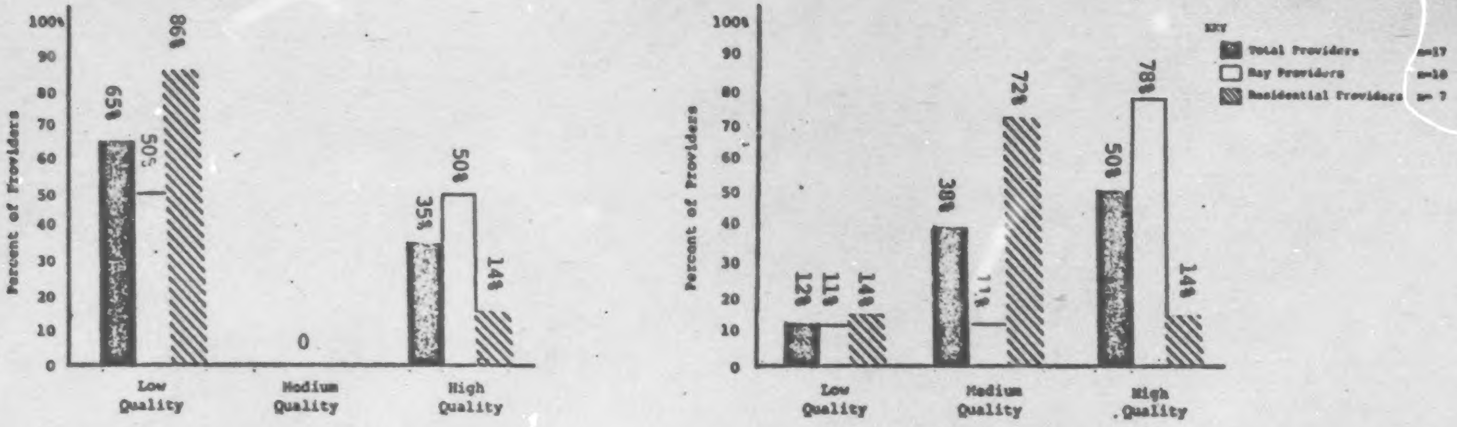
Extent of Parent Involvement with Child



AGGREGATE
Parent Involvement

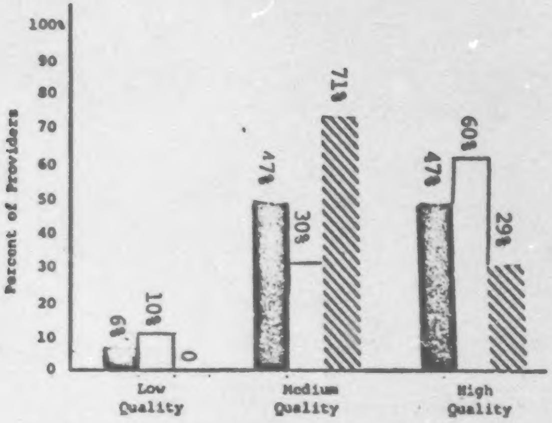
FIGURE MR-5

QUALITY OF PARENT INVOLVEMENT
IN PROVIDERS SERVING SEVERELY MENTALLY RETARDED CHILDREN AND YOUTH



Respect for Clients

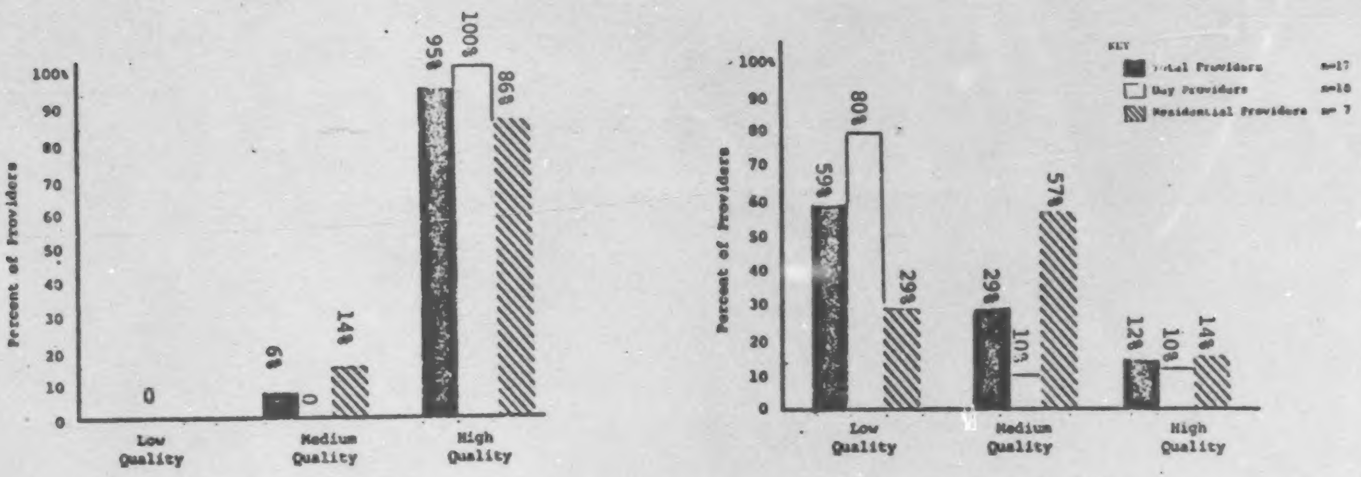
Privacy



Non-Institutionalized Environment

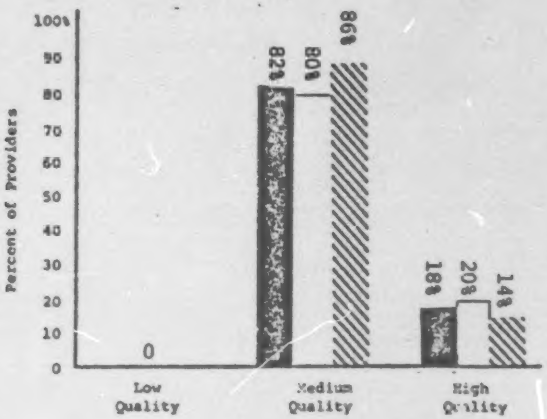
FIGURE MR-6

QUALITY OF HUMANIZATION OF INSTITUTIONAL SETTING
IN PROVIDERS SERVING SEVERELY MENTALLY RETARDED CHILDREN AND YOUTH



Personal Possessions

Physical Comfort



AGGREGATE
Level of Humanization

FIGURE MR-[illegible] (CONTINUED)

QUALITY OF HUMANIZATION OF INSTITUTIONAL SETTING
IN PROVIDERS SERVING SEVERELY MENTALLY RETARDED CHILDREN AND YOUTH

5.5 Quality of Extent of Training and Evaluation

The quality of extent of training and evaluation was high in 41% of the providers, medium in 47%, and low in 12% of the providers primarily serving severely mentally retarded clients. This aggregate quality variable measures the extent to which a provider:

(1) Assesses client progress;

(2) Evaluates its educational and habilitative services and/or its overall program of services; and

(3) Offers staff training.

The quality of program evaluations and staff training opportunities was higher in the day providers than in the residential providers. The quality of client assessments, however, was higher in the residential providers than in the day providers.

Figure MR-7 displays the distribution of day, residential and total providers on the overall quality of extent of training and evaluation and on each of the 3 component variables.

5.6 Quality of Client Movement

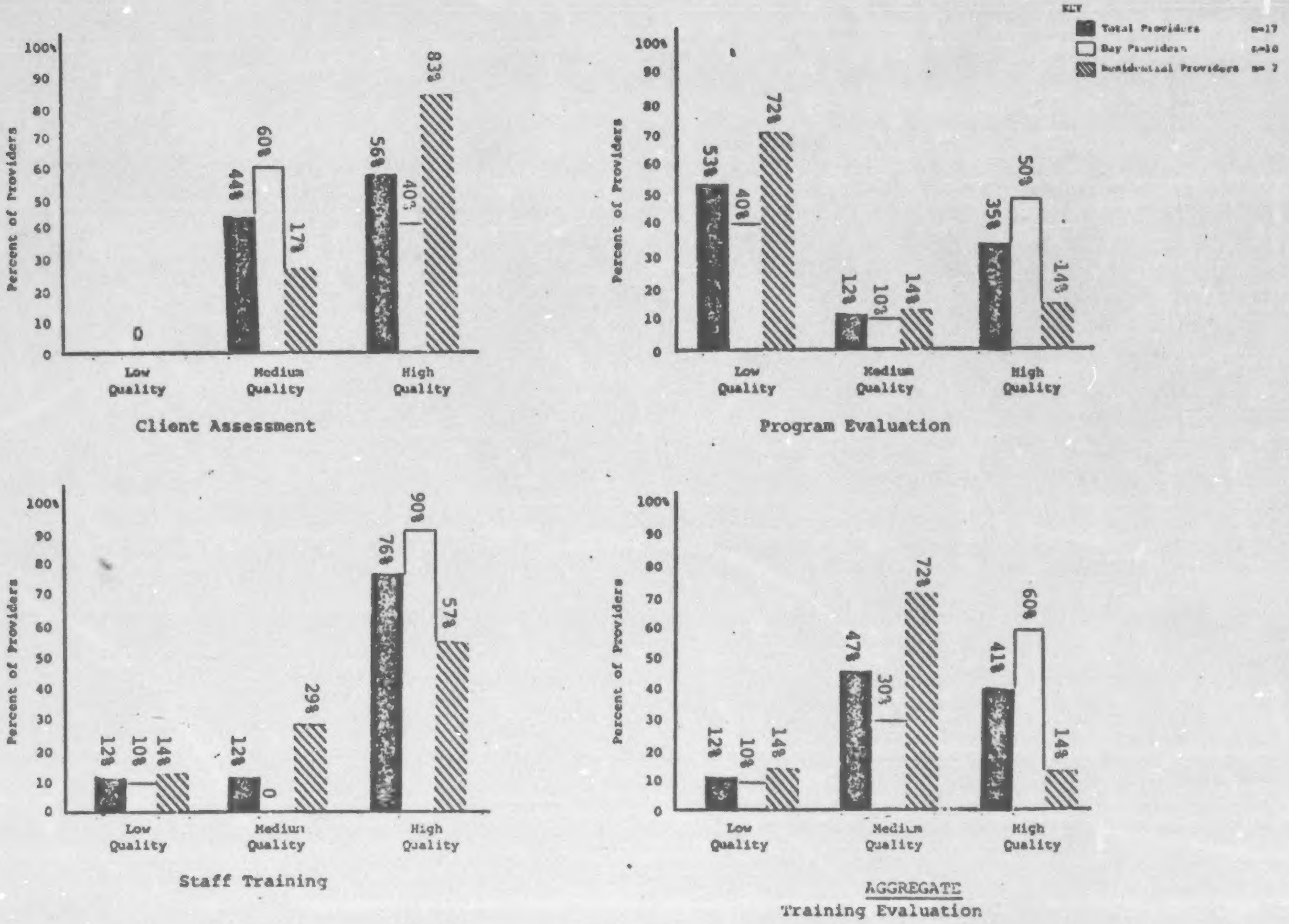
Evidence of client movement out of the provider was of high quality in 30% of the providers, medium quality in 30%, and low quality in 40% of the providers. This aggregate variable measures:

(1) The extent to which a provider has released clients because the client's level of functioning improved;

(2) The extent to which the provider has released clients to less sheltered settings; and

(3) The extent to which released clients are receiving educational and habilitative services following discharge from the provider.

Residential providers proved to be of higher quality than day providers in terms of releasing clients with improved levels of functioning and clients' receipt of educational and habilitative services after discharge. Day providers, however, scored higher than residential providers on the release of clients to less sheltered settings.



Client Assessment

Program Evaluation

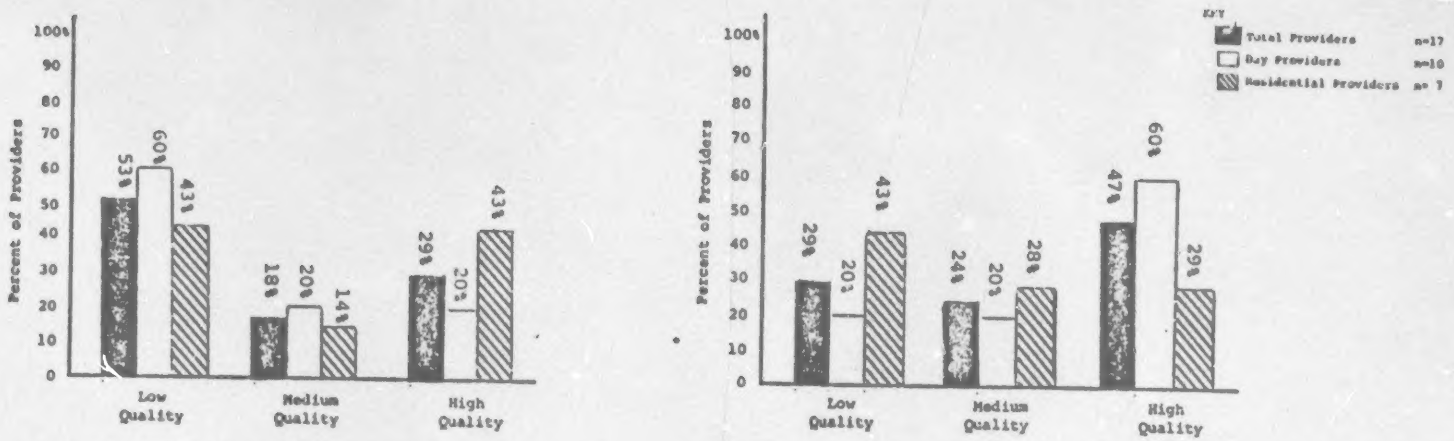
Staff Training

AGGREGATE
Training Evaluation

FIGURE MR-7

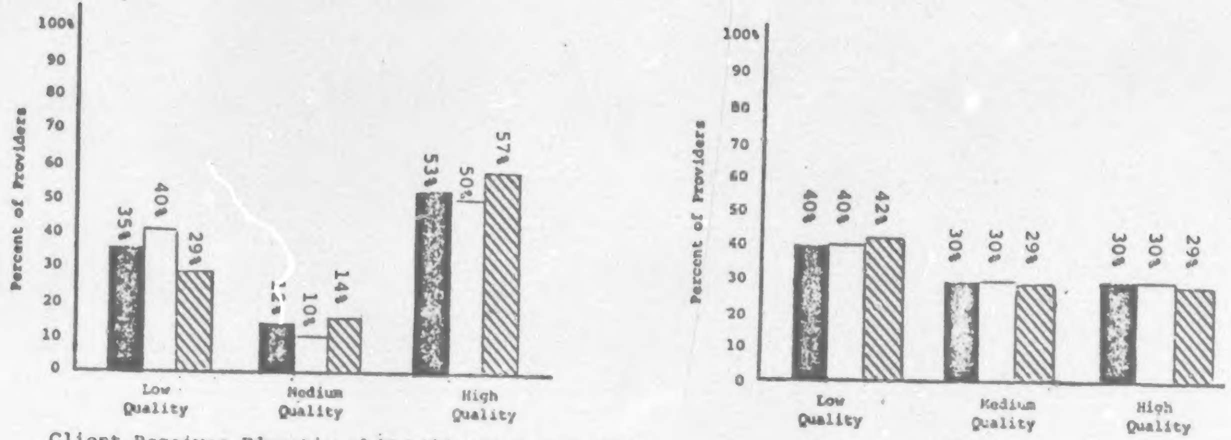
QUALITY OF EXTENT OF TRAINING AND EVALUATION IN
PROVIDERS SERVING SEVERELY MENTALLY RETARDED CHILDREN AND YOUTH

Figure MR-8 shows the distribution of day, residential, and total providers serving primarily severely mentally retarded children on the overall quality of evidence of client movement and on each of the 3 component variables.



Client Level of Functioning Improved

Client Movement to Less Sheltered Settings



Client Receives Educational/Habilitative Services After Discharge

AGGREGATE
Evidence of Client Movement

FIGURE MR-8

QUALITY OF EVIDENCE OF CLIENT MOVEMENT

CHAPTER III

A CASE STUDY OF PROVIDERS OF SERVICES TO SEVERELY EMOTIONALLY DISTURBED CHILDREN AND YOUTH

1.0 SUMMARY

A total of 21 providers out of the 100 sampled for this study serve severely handicapped children and youth, aged 21 and under, a majority of whom are severely emotionally disturbed. Twelve of these providers are private nonprofit organizations, 2 are private profit-making organizations and 7 are public facilities. Eight of the 21 providers serve severely emotionally disturbed clients on a day basis only, 9 provide only residential care, and 4 offer both day and residential services.

Across the 21 providers serving primarily emotionally disturbed children and youth, the average number of clients discharged is almost double the average number admitted. Most clients are discharged because their functional levels have improved; most have returned to their natural homes, and a large majority are receiving educational or habilitative services in local public or private schools.

The majority of this group of providers offer a wide range of services to their severely emotionally disturbed clients. Educational/habilitative services and diagnostic/referral services are the direct care service components most frequently offered by these providers; almost two-thirds of staff time is spent in the education and habilitation of clients. One hundred percent of the severely disturbed children and youth in these providers receive educational/habilitative services, with each client receiving an average of 35 hours per week. Many types of professional and paraprofessional staff (including therapists, psychologists, psychiatrists, social workers and attendants as well as teachers) help to provide these educational/habilitative services, most often emphasizing academic skills and using techniques of behavior modification and with attention to individuals.

Eleven of the 21 providers are formally evaluated on some regular basis by government agencies (in most cases) and/or by internal staff (in a few). Most of the 21 providers perceive staff capability as their greatest asset and lack of sufficient funding as their major liability. Formal assessments of clients' functional levels and progress take place in all of the 21 providers, using both standardized tests and provider-developed procedures.

Teachers (certified and noncertified), attendants and therapists are in greatest proportion among the total direct care staff of these providers. Most staff members are women, and a vast majority of total staff are white. All providers of this group offer formal training opportunities for staff.

There is some degree of parent involvement in all 21 providers serving primarily emotionally disturbed children and youth, most often taking the form of discussion with staff about their child. Parents can visit children at any time or within visiting hours in more than three-quarters of the residential providers. More than half of the clients served by residential providers are visited by their families at least once a month, and more than half make home visits at least once a month.

Community contact is maintained by providers through volunteer programs, donated goods and services, conferences and public relations work. Clients in many providers attend public schools, and educational/recreational trips into the community are frequent.

High occurrence of change over the last 5 years is indicated by this group of providers, most often in the areas of enrollment, funding, facility and staff size, and range/quality of services offered. General expansion and program improvement are anticipated by most providers. Changing relationships to public school districts are expected as a result of right-to-education laws.

Most observations of severely disturbed clients took place in classroom settings. The condition of observation settings was excellent in a majority of cases. A wide range activities (mostly educational or recreational) were taking place in observation settings, with an average staff:client ratio of 1:2.5.

The average annual per capita cost in providers serving severely emotionally disturbed clients was $13,332. An average of 80% of this cost is attributable to personnel costs. Within personnel expenditures, an average of 72% of the costs are incurred in providing direct care to clients, which constitutes an average of 53% of the total annual per capita costs. State government is the most important funding source for these providers, with federal and local government and families making secondary contributions.

The quality of educational and habilitative services was found to be high in the vast majority of the providers serving primarily emotionally disturbed children and youth. In the areas of parent involvement, humanization of institutional setting, extent of training/evaluation and client discharge, two-thirds or more of the providers are high or medium in quality. In the area of staff-client interactions, the quality was found to be low in three-quarters of the providers. Day and residential providers of this group were found to be of high and approximately equal overall quality; residential providers, however, run on a per capita cost that is twice that of day providers.*

2.0 OVERVIEW

A total of 21 providers out of the 100 included in the study serve severely handicapped children and youth, aged 21 and under, a majority of whom are severely emotionally disturbed.** Twelve of these providers are private nonprofit organizations, 2 are for-profit and 7 are public facilities.

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*Note: two factors should be considered in comparisons of quality between day and residential providers:

(1) No attempt was made in this study to assess the comparability of the severely handicapped populations in day versus residential providers; therefore differences in quality may actually reflect differences in the needs and characteristics of the populations served; and

(2) Residential providers are concerned with provision of 24-hour care and are therefore different in scope and purpose from day providers, with a far heavier emphasis on basic care services.

**Note: when the term "providers" is used throughout this case study, the referent is the 21 providers which serve a majority of severely emotionally disturbed clients, aged 21 and under.

Eight of these 21 providers serve severely emotionally disturbed clients aged 21 and under on a day basis only, while 9 providers are strictly residential and 4 provide both types of care for this client group. Only 1 of the 21 providers serves individuals in their homes or foster homes as well as at its central facility.

Providers of service to the severely emotionally disturbed focus primarily on the return of these clients to school, to their natural or foster homes, or to the community. In some cases, where survival in an unstructured environment is not realistic, clients are being prepared to go on to a less institutional setting.

There are a range of specific skills necessary for achieving these goals. Academic and communication skills are prime areas of attention. Emphasis is on the development of personal resources to enhance the probability of the individual growing intellectually, emotionally and socially, to the extent of his/her ability.

Some providers are also attempting to ensure the improved social integration of clients through increased family and community understanding and acceptance. Goals are oriented toward redirecting not only the client's lifestyle but that of the family and community as well, "so that they can survive together."

Providers are fairly evenly distributed among 12 states with the greatest concentration of providers on the east coast (12). The facilities are situated in suburban (48%) and rural (19%) as well as urban (24%) areas.

3.0 CHARACTERISTICS OF PROVIDERS

3.1 Client Characteristics

In 95% of the providers serving severely emotionally disturbed clients there are no mandated age limits for admittance. The average age of admittance of the youngest group of clients is approximately 5 years; the average age of the oldest clients admitted is 18 years. The age range of severely emotionally disturbed clients presently being served is between 0 and 64 years.

The distribution of clients by ethnicity is shown in Table ED-1.

Table ED-1

Ethnic Distribution of Clients

Ethnic origin	Average % of provider population	Range
White	80%	23-100
Black	15%	0- 51
Spanish surname	3%	0- 18
American Indian	0.7%	0- 6
Oriental	0.1%	0- 2
Other	0.4%	0- 8

In most cases, three-quarters of the client population is male (78% average). Females account for only one-quarter of the severely emotionally disturbed population being served at the 21 providers. Estimates of the amount of time needed for clients to become self-sufficient in toileting, dressing, and self-feeding skills are almost twice as long for day providers (15 months) as for residential providers (6 months). The average length of stay for severely emotionally disturbed clients in residential providers is 25 months, the average stay for clients in day providers is 32 months.

3.2 Enrollment

3.2.1 Admission

Many providers which primarily serve severely emotionally disturbed children and youth are mandated to serve clients of particular ages, types of disabilities and levels of severity. The most frequent mandates reported by providers are to serve emotionally disturbed clients (75% of the providers), severely disturbed clients (70%) and moderately disturbed clients (35%). The average number of persons applying for admission to these providers from July, 1973 to May, 1974 was 44, with a range from 5 to 150 applicants across the total group. The rate of acceptance into the providers during that time period ranges from 4% to 100%, with an average acceptance rate of 49%, or 4% of currently enrolled severely handicapped children and youth. Day providers accepted 66% of applicants on the average, while residential providers were only able to accept 37% of applicants.

A large majority of providers require that clients' homes be within a certain geographical proximity to the facility; usually state boundaries are the criteria. This requirement precludes problems of funding for out-of-state clients, and helps to ensure continued parent/family involvement and frequent visiting. Exclusionary criteria used by a number of providers limit the acceptance of clients who require medical care or who are non-ambulatory. Severe psychotics, those with extreme suicidal or homicidal tendencies and/or those requiring a closed environment are sometimes excluded, the intent being to maintain a protected environment for currently enrolled clients. To further ensure that growth potential is maximized for the group, individuals for whom the program is considered inappropriate may be excluded. Usually, parental willingness to be involved with the clients and provider is mandatory. Extenuating circumstances make up other criteria for client acceptance, including the provider's interest in the client's specific disorder, or lack of community availability of appropriate facilities for a specific individual.

Six of the 21 providers currently maintain a waiting list for their services. These providers, which are residential, have an average of 5 persons on the waiting list and an average waiting period of 3 months. Only 3 residential and 2 nonresidential providers have a minimum and a maximum length of enrollment. The residential average minimum is 12 months, and the maximum is 5 years; the day minimum is 17 months, and the maximum is 7 years.

Given their current resources, 20% of the providers feel that they could serve more clients (on the average, 7 more clients), 68% feel they are operating at full capacity; and 10% feel that they should be serving fewer clients.

3.2.2 Discharge

Eighteen of the providers which primarily serve severely emotionally disturbed clients have discharged a number of these clients since July 1, 1973. Each of the 18 providers has released 41 clients on the average. Clients most frequently left the provider because their functional level improved (61%). In both day and residential providers, the largest majority of clients who have been discharged have returned to their natural homes. A small number of clients from both day and residential facilities were placed in foster homes, group homes or other living arrangements. Of these clients who have been discharged, 97% from day providers and 80% from residential providers are currently receiving educational or habilitative services in either a local public or private school. Other discharged clients receive educational/habilitative services at residential facilities or specialized day programs.

3.3 Services Offered to Severely Handicapped Children and Youth*

The majority of the 21 providers which primarily serve severely disturbed children and youth offer a wide range of service components to this client group. Table ED-2 displays the type of service provided, the staff time spent in providing the service to severely emotionally disturbed clients in day, residential and total providers. As reported in providers serving severely emotionally disturbed clients, staff spend the greatest portion of their time providing educational/habilitative services and basic care services to this client group.

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*Note: for a description of the 7 service components and the 12 staff categories used in the study, see pages 4-7 of the Introduction to this volume.

Table ED-2

Services Offered to Severely Handicapped Clients

Service component	Percent of providers offering the component			Average staff time spent providing the service		
	Total n=21	Day n=8	Residential n=13	Total n=21	Day n=8	Residential n=13
Basic Care	81%	88%	77%	15%	5%	23%
Educational/habilitative services	91%	100%	85%	60%	68%	55%
Medical services	38%	0%	62%	1%	0%	2%
Family and community services	81%	100%	69%	6%	9%	4%
Diagnostic and referral services	91%	100%	85%	5%	4%	7%
Administration	91%	100%	85%	13%	18%	9%
Support services	67%	38%	85%	3%	1%	4%

No day providers offer medical services to severely disturbed clients. Twenty-five percent more day providers offer family services than do residential providers, while more than twice as many residential providers offer support services than do day providers. Staff in residential providers (which offer 24-hour care, 7 days per week) spend almost 5 times as much time delivering basic care services as do staff in day providers.

3.3.1 Educational and habilitative services offered to severely handicapped children and youth

All of the 21 providers which primarily serve severely disturbed clients offer educational and habilitative services. One hundred percent of the severely handicapped population at the providers receive these services. On the average, each client receives 35 hours per week of education or habilitation. These services are delivered by a variety of professionals, as shown in Table ED-3. Teachers, aides and therapists are the professionals who deliver most of the educational/habilitative services.

Table ED-3

Percent of Educational/Habilitative
Services Delivered by Staff

Staff Category	Percent of educational/habilitative services delivered		
	Total n=21	Day n=8	Residential n=13
Teacher (certified)	28%	32%	25%
Teacher (noncertified, aide)	26%	37%	17%
Attendant	9%	0%	16%
Nurse	1%	0%	1%
Therapist	21%	23%	20%
Social worker	2%	.8%	2%
Psychologist	1%	3%	1%
Psychiatrist	2%	0%	4%
Medical doctor	0%	0%	0%
Administrator	2%	3%	1%
Support staff	1%	0%	1%
Other staff	6%	2%	10%

No difference in the percent of severely emotionally disturbed clients served is reported in day, as opposed to residential, providers. However, in residential providers each client receives 18 hours per week of educational/habilitative service, while clients receive 29 hours per week of such service in day providers. In day providers, teachers and teacher aides deliver 69% of the educational/habilitative services, as opposed to 42% in residential providers, where attendants, therapists and other staff (e.g., houseparents) deliver a substantial part of the educational/habilitative services. Among day providers, therapists deliver almost one-quarter of the educational/habilitative services.

The most common educational/habilitative objective across the 21 providers serving severely emotionally disturbed clients is concerned with returning clients to their communities to live and to attend school.

Instruction in academics and speech therapy are offered most frequently by providers. Table ED-4 illustrates the types of educational/habilitative activities offered to severely disturbed clients.

Table ED-4

Skills Training Offered to Severely Handicapped Clients

Instructional area	Number of providers offering skill training
Academic skills	15
Speech therapy	7
Recreation skills	6
Prevocational skills	5
Music therapy	4
Counseling	3
Self-help skills	3
Language training	3
Home economics	3
Industrial arts	3

In day providers, speech therapy and academics are provided most often, while residential providers most often provide recreation and academics. Offered least often by day providers is recreation, while residential providers offer training in self-help skills least often. Therapy sessions are offered by 30% of providers.

The educational techniques used by providers to achieve their educational/habilitative objectives are quite varied. As is evident in Table ED-5, behavior modification is used in 14 of the 21 providers to teach severely disturbed children a variety of functional skills.

Table ED-5

Educational/Habilitative Techniques
Used by Providers

Educational/habilitative technique	Number of providers using technique
Behavior modification	14
Individual attention	10
Psychotherapy	6
Individual programming	5
Physical contact	3
Play therapy	2
Modelling	2

Sixty-six percent of residential providers offer individual attention, while only 25% of day providers offer individual attention to severely disturbed clients.

Numerous other instructional and recreational activities are offered to severely disturbed clients at the 21 providers including field trips to community areas (15 providers), physical education (11 providers), swimming (10 providers) and free play (8 providers). Two providers offer scouting programs, 1 a foster grandparent group and horseback riding. Art, camping, bowling and movies are offered to severely disturbed clients in a number of facilities. There are no discernible differences in the types of extracurricular activities offered in day, as opposed to residential, providers.

3.3.2 Staff perceptions of resources available to clients

3.3.2.1 Materials. All of the 21 providers serving severely emotionally disturbed clients have a wide array of materials available to this client group. Plants, games, building materials, books and magazines, writing and drawing materials, and musical instruments are available in all providers. These materials, with the exception of games, are more than twice as accessible (i.e., available at all times) to clients in residential providers than in day providers. Building materials and musical instruments are in more sufficient quantities in day than in residential providers.

Animals are least often available across all providers; and toys are the least accessible materials to clients. Musical instruments are least sufficient across all providers.

3.3.2.2 Possessions. All of the 13 residential providers serving severely emotionally disturbed clients report that these clients have their own clothing which is always returned to them following laundering. Members of this client group also possess other personal articles (such as radios, stuffed animals, toys, etc.) in 92% of the residential providers sampled. All residential providers report that severely emotionally disturbed clients have private storage areas available to them for storing personal articles.

3.3.2.3 Work opportunities for clients. Three-quarters of the 21 providers serving severely emotionally disturbed clients offer those clients the opportunity to earn money or credits. Thirteen providers report that severely disturbed clients earn money, while 3 report that these clients earn credits.

In the 13 providers where clients earn money, 6 providers report that clients earn less than $1 per week, while clients in other providers earn from $1 to $5 per week. Severely emotionally disturbed clients acquire money and credits by performing a number of tasks as shown in Table ED-6. Money is earned primarily for grounds maintenance and for housekeeping tasks.

Table ED-6

Work Performed by Severely Handicapped Clients for Money or Credits

Type of work performed by client	No. of providers where money is earned		No. of providers where credits are earned	
	Day n=8	Residential n=13	Day n=8	Residential n=13
Janitorial	2	4	1	-
Care of other clients	-	1	-	-
Food service	1	5	2	-
Laundry	-	2	-	-
Housekeeping	1	8	-	-
Clerical	1	1	-	-
Good behavior	1	2	2	-
Grounds & maintenance	1	9	-	-
Other tasks	-	5	-	-

In all residential providers offering these opportunities (75%), clients earn money. Money is earned in half of the day providers, while credits are acquired in the remaining half of day providers offering these opportunities (75%).

3.4 Evaluation

3.4.1 Evaluation of provider services

Formal evaluations of services have taken place during the past 5 years in 11 (52%) of the providers serving severely emotionally disturbed clients. In most providers evaluations are conducted by local, state or federal agencies, and in a few providers internal staff members conduct evaluations. Results are most often used for provider funding or accreditation and/or for program development. Regular evaluations take place in 7 of the 11 providers in the areas of basic care and diagnosis/referral; 6 providers are evaluated in the areas of medical care, family and community services, administration and staff support.

All 11 of these providers were evaluated in the area of educational/habilitative services between March, 1973 and May, 1974. Generally, findings were positive. Specific problems identified by the evaluations include needs for more aftercare, more work with the families of clients and the improvement/strengthening of the academic component.

Most provider directors in this group perceive their staff as a major strength; experience, competence, morale, stability and cohesiveness are mentioned as factors contributing to their effectiveness. Small provider size and individualized provision of services are frequently mentioned as strengths, and location of facilities near the resources of a metropolitan area is often seen as an advantage.

Provider weaknesses as perceived by their directors vary greatly among this group, most often falling in specific program and policy areas. Common to almost all providers serving emotionally disturbed clients, however, is a lack of sufficient funding. Needs for closer work with families and better follow-up after client discharge are also frequently cited as weaknesses. Efforts to overcome weaknesses include active solicitation of funds from private and public sources and program reorganization/redesign.

3.4.2 Client assessment

Severely emotionally disturbed clients, aged 21 and under, are formally assessed in all 21 providers. The frequency of regular assessments ranges from daily to once every 2 years; in a few providers, assessments are made only on admittance and/or discharge. Statistics on the range and average percent of clients assessed are displayed in Table ED-7 below. Particularly notable is the 100% assessment rate across providers in the area of social and emotional competence. The only areas in which percentages of clients assessed differed noticeably between day and residential providers are those of self-sufficiency (day 100%, residential 78%) and intelligence (97% residential, 74% day).

Table ED-7

Client Assessment

Assessment area	Mean % of clients assessed	Range of clients assessed
Self sufficiency	88%	0-100%
Communication	87%	0-100%
Social, emotional competence	100%	----
Intelligence	76%	0-100%
Academic skills	88%	0-100%
Other (e.g., perceptual, motor)	58%	0-100%

Procedures used for assessments are the same for all clients in 43% of the providers and vary according to client needs in 57%. A number of standardized psychological, perceptual and developmental tests are used in most providers along with provider-developed and adapted tests. In about 20% of the providers no standardized tests were mentioned: instead assessment is done through checklists and daily records combined with staff team reviews and conferences. Many of the providers serving severely emotionally disturbed children and youth have their clients tested by professional consultants and referring physicians. In 95% of the providers, assessment results are used in developing instructional programs for clients; in most providers results are also used to measure client progress and to evaluate program components. Residential providers use assessment results much more frequently than do day providers to assign clients to appropriate groups in the provider and to determine placement after discharge.

3.5 Provider Staff Characteristics

The average per capita number of full-time equivalent staff (based on a 40-hour work week) in the 21 providers who work with severely emotionally disturbed clients aged 21 and under are shown by job category in Table ED-8. The highest ratio of staff to clients among day providers is in the category of noncertified teacher (1:5), followed by certified teacher (1:6); among residential providers the highest staff:client ratio is in the attendant category (1:4), with the next highest ratio in support staff (1:5). In all staff categories except teachers (noncertified and certified), residential providers serving severely emotionally disturbed clients show higher staff:client ratios than day providers of this group.

The average total weekly overtime hours worked by staff across the providers is 28, with a range from 0 to 114 hours. The greatest amount of overtime is worked by administrators (in 10 providers) and by teachers (in 6 providers). An average of 61% of the staff in providers are women, and the average total nonwhite staff across providers is 9%.

Pre-service training is offered to staff members by 55% of the providers; in-service training is offered by 100%. In 63% of the day providers and 33% of the residential providers with training programs funding is available for course work undertaken by staff. Objectives of training programs include: basic orientation to philosophies and practices of programs, behavior management and problem-solving techniques, understanding of child development, information on curriculum and materials, individual case conferences, and information on uses of medication.

Table ED-8

Average Full-Time Equivalent Staff per Client

Staff category	Average full-time equivalent staff per client		
	Total n=21	Day n=8	Residential n=13
Teacher (certified)	.15	.15	.15
Teacher (noncertified, aide)	.13	.18	.10
Attendant	.15	-0-	.25
Nurse	.03	.002	.05
Therapist	.12	.11	.13
Social worker	.05	.03	.06
Psychologist	.01	.01	.01
Psychiatrist	.006	.001	.01
Medical doctor	.001	-0-	.001
Administrator	.14	.13	.14
Support staff	.12	.007	.19

Day and residential providers serving severely emotionally disturbed children differ in many respects. Staff in residential providers work 2.5 times more overtime hours than staff in day providers. The percentage of women staff in residental providers is lower than in day providers. The percentage of nonwhite staff is about 10 times higher in residential providers than in day providers.

3.6 Parent Participation and Community Involvement in the Providers

3.6.1 Parent participation

Some degree of parent participation is evident in all 21 of the providers visited which serve severely emotionally disturbed children and youth. By far the most predominant form of parent/provider interaction is discussions between parents and staff members (see Figure ED-1 below); high involvement is reported as well in parent education sessions and in home visits by staff, particularly among day providers. There is negligible parent participation as provider board members, advisors, or volunteers in classrooms or wards.

Only a few of the staff interviewed in this group of providers feel that parent involvement has no impact on the progress and development of clients, while well over 75% believe it has a high impact, usually resulting in a major improvement in a child's performance.

Visiting hours for parents exist in 39% of the residential providers serving severely emotionally disturbed clients, while parents visit by appointment only in 23% and visit at any time in 38% of the providers. An average of 58% of the clients receive family visits once a month or more often, 37% receive visits less than once a month, and 6% are never visited by their families. Public transportation to and from provider facilities is available for 75% of these providers, but private car is the major means of transportation used by families for visiting clients in 73% of the providers.

An average of 55% of the emotionally disturbed children and youth in residential facilities make home visits at least once a month, 41% are taken home less than once a month, and 8% never make home visits. While some providers in this group require that parents take their child home occasionally, others offer no incentives for parents to take their child home. Some providers encourage home visits by telephone calls to parents, through family counseling services and by offering assistance with travel.

3.6.2 Community involvement

In 90% of the providers serving primarily emotionally disturbed clients there are opportunities for severely handicapped children and youth to interact with nonhandicapped adults and peers. Clients in many providers attend public schools; visits are made to recreational and shopping facilities, libraries and restaurants. In most providers, volunteers from schools, churches and service organizations interact with clients.

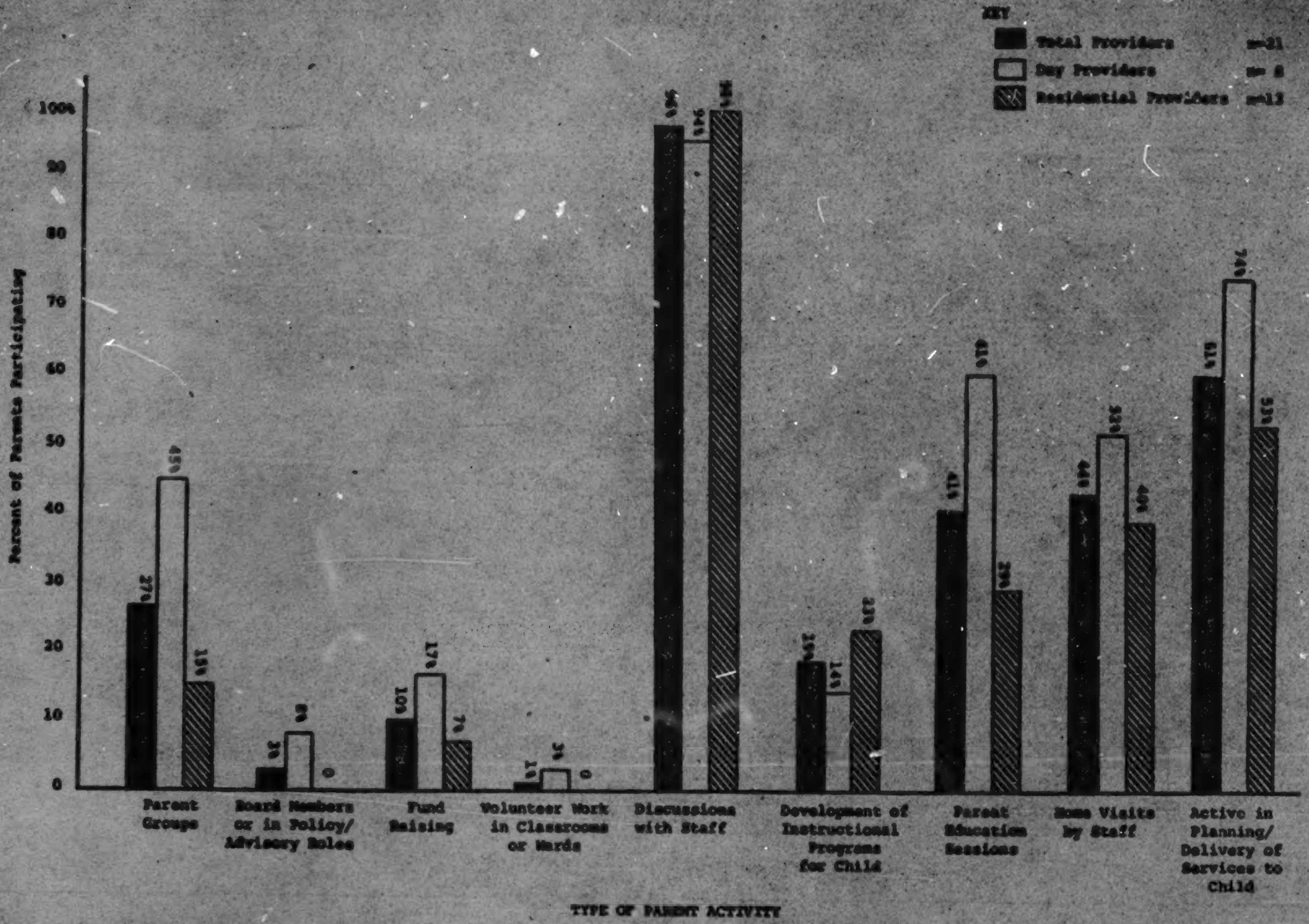

FIGURE ID-1

EXTENT OF PARENT INVOLVEMENT
IN PROVIDERS SERVING SEVERELY EMOTIONALLY DISTURBED CHILDREN AND YOUTH

A total of 80% of these providers have regular volunteer workers, ranging from .02 to 2 per capita and working an average of 5 hours per client per week.* The overall average of hours per week worked by volunteers ranges from .04 to 26 hours per client. Volunteers in this group of providers work most often on a 1 to 1 basis with clients and provide tutoring, teaching assistance and basic care services. The often help with outings and arts/crafts projects, and sometimes simply visit with clients.

A wide variety of donations are made to 85% of the providers in this group; among the goods and services donated are tickets to movies and sports events, toys, equipment, food, lumber, construction work, music and pottery classes, and consultant services. One provider has free use of a ski facility; 1 lists a horse and hay among items donated.

Efforts are being made to attract greater community interest in almost all of these providers. In addition to speaking engagements, news releases, brochures and newsletters, many providers sponsor or encourage attendance of professional conferences, hold seminars, give special parties and have open houses. Special effort to communicate with public schools and local and state agencies is evident in a few providers.

3.7 Changes in Provider Services

In over 60% of the providers serving primarily emotionally disturbed children and youth, significant changes are reported to have taken place in 8 of 15 areas over the past 5 years. These areas include enrollment size (increase in most providers); length of enrollment (both decreases and increases reported); ages of clients (wider range served, younger average age); funding level/source (higher for most, with more public, less private support); physical size of facility, range of services offered, number of staff (growth usually indicated); and educational approaches and materials (expansion, specialization, and general improvement in most providers). Less than half of the providers have seen significant change in the types and severity levels of handicaps served, discharge criteria, and policy control and management. Overall, this group of providers has undergone a great deal of change in the past 5 years.

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*Note: the average volunteer hours are 7.3 hours per client per week among day providers and 3.6 hours per client per week among residential providers.

Frequencies of change over the past 5 years are similar for day and residential providers of this group, but areas of greatest change differ. Eighty-six percent of the day providers have had increases in their funding level or changes to public support from private support (as opposed to 50% of the residontial providers) and have expanded the range of services offered (as opposed to 54% residential). Eighty-five percent of the directors of residential providers (57% of day providers) note expansion in the physical size of their facility over the past 5 years and an increase (in 1 case a decrease) in the number of staff employed (versus 71% of day providers). Improvements in educational approaches/materials took place in 77% of the residential providers as opposed to 57% of the day providers. Living arrangements have changed in 54% of the residential providers, with a new emphasis on group homes, greater privacy for clients and "normal" living situations.

Seventy-five percent of the directors of both day and residential providers cite recent legislation which will affect their programs. Right-to-education laws will change the relationships of providers to public school districts, and legislation centered around children's and patients' rights will affect admission and discharge procedures and program development.

General expansion, development and improvement is anticipated by most directors of these providers. Changes foreseen include new construction, intensified services, new programs and greater numbers of staff and clients. Seventy-six percent of the respondents indicated that their providers would need additional facilities if enrollment were to increase by 25%.

4.0 OBSERVATIONS OF SEVERELY HANDICAPPED CHILDREN AND YOUTH AND THE STAFF SERVING THEM*

4.1 Description of Settings Observed

A total of 750 time-sampled observations were conducted in various settings in the 21 providers which service primarily emotionally disturbed children. Classrooms were the most frequently observed settings (57% of the observations). Other settings observed in order of frequency were: outside areas such as playgrounds; living rooms or day halls; auditoriums and gyms; dining areas; workshops; therapy rooms; and wards.

In 72% of the observation cases, the condition of the interior of the setting was excellent. The odor of the setting was neutral in 98% of the cases, and in only 2% of the observations there was a noxious odor. In those settings with sleeping areas, accommodations were very private in 44% of the observations, somewhat private in 40% and not private in 16% of the observations. The majority of the toileting areas observed were very private (85% of the observations); 12% of the toileting areas were somewhat private and 3% were not private. The level of institutionalization (the extent to which the environment is homelike versus highly institutionalized) was low in 45% of the observations, moderate in 51% and high in 4% of the observations. A high level of institutionalization was 4 times as frequent in observations of day providers as in observations of residential providers.

4.2 Description of Activities Observed

The most frequently observed activities in these settings were educational and recreational. Table ED-9 lists the types of activities which were observed and the corresponding percent of the total observations in which they occurred.

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*Note: for a description of observation procedures used in the study and operational definitions of items on the Observation Schedule, see pages 8-10 of the Introduction to this volume.

Table ED-9

Types of Activities Observed

Type of activity	Frequency of occurrence (% of total observations)
Educational	42%
Recreational	22%
Mealtime, snacktime	10%
Free play	13%
No organized activities	4%
Naptime	1%
Vocational	2%
Self-care	2%
Therapy	3%
Basic care	1%

A high activity level was observed in 36% of the observations, a moderate level in 63%, and a low level in 11%. Behavior modification took place in 18% of the observations. In the majority of cases (77% of the observations) an adequate number of play and learning materials were available. In 11% of the observations, however, there were no play and learning materials available. The materials available were in good to excellent condition and were of high quality in most observations.

In all of the observations, clients were adequately clothed in clean, well-fitting, and appropriate attire. In 50% of the observations, male and female clients were grouped together in the various settings; in 45% of the observations the settings were composed of all male clients and in 5%, all female clients. Severely emotionally disturbed clients were grouped homogeneously with clients of similar levels of disability in 58% of the observations. In 18% of the observations, however, severely emotionally disturbed clients were in settings where less than 20% of the clients were severely handicapped.*

The average number of clients in a setting was 6 with a range from 1 to 46. The number of staff per setting ranged from 1 to 10, with an average of 2. The average staff:child ratio was 1:2.5 with a range from 2:1 to 1:30.

Day and residential providers serving emoti[illegible]y disturbed clients differed in several respects. Settings with no play materials available were observed 2.5 times more frequently in residential providers than in day providers. In observations of residential providers, there tended to be a lower staff:child ratio than in observations of day providers (1:3 in residential and 1:2 in day).

4.3 Description of Clients and Staff Observed

Systematic observations of 251 settings within 20 providers** which primarily serve severely emotionally disturbed clients indicated that there were 7 distinct types of behaviors taking place between clients (peer to peer) and between clients and staff including:

(1) "Inner-directed" behaviors on the part of the clients -- clients acted without observable external cause of interaction with their environments;

(2) Brief staff-client interactions;

(3) Sustained staff-client interactions;

(4) Peer to peer interactions;

(5) Interactions between clients (peer to peer) and clients and staff during play activities;

(6) Interactions between clients and staff during instructional activities; and

(7) Negative affect on the part of clients -- aggressive behaviors.

---

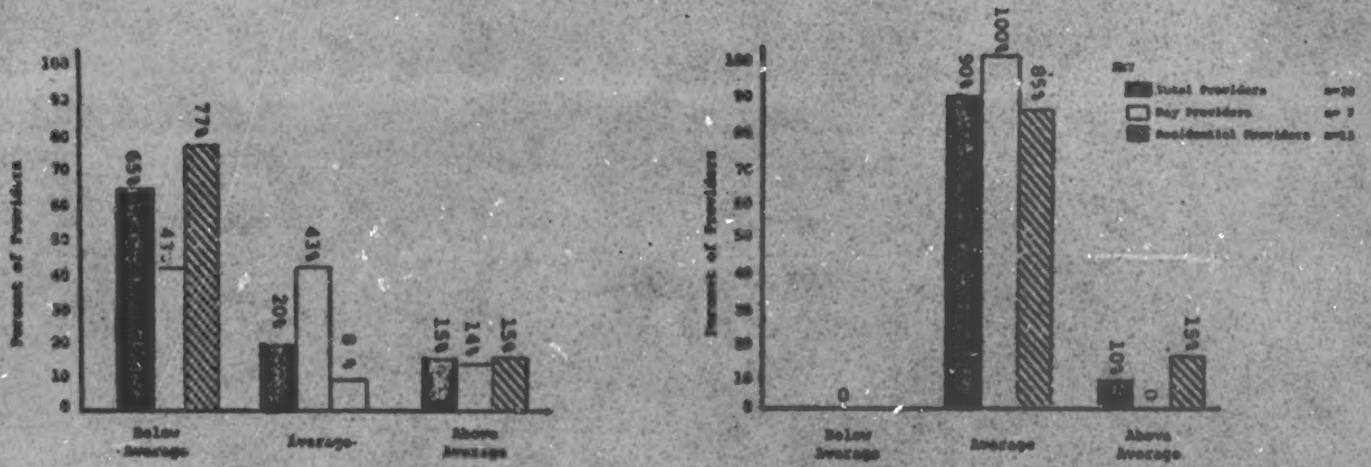
*Note: in 20% of the observations, the observer was of the opinion that none of the clients in the observation setting were "severely" handicapped according to the definition utilized in this study.

**Note: one provider refused to allow systematic observations.

Figure ED-2 below depicts the prevalence of each of the 7 behavior types in day, residential and combined providers serving emotionally disturbed clients, compared with the average for all 100 providers included in the study.

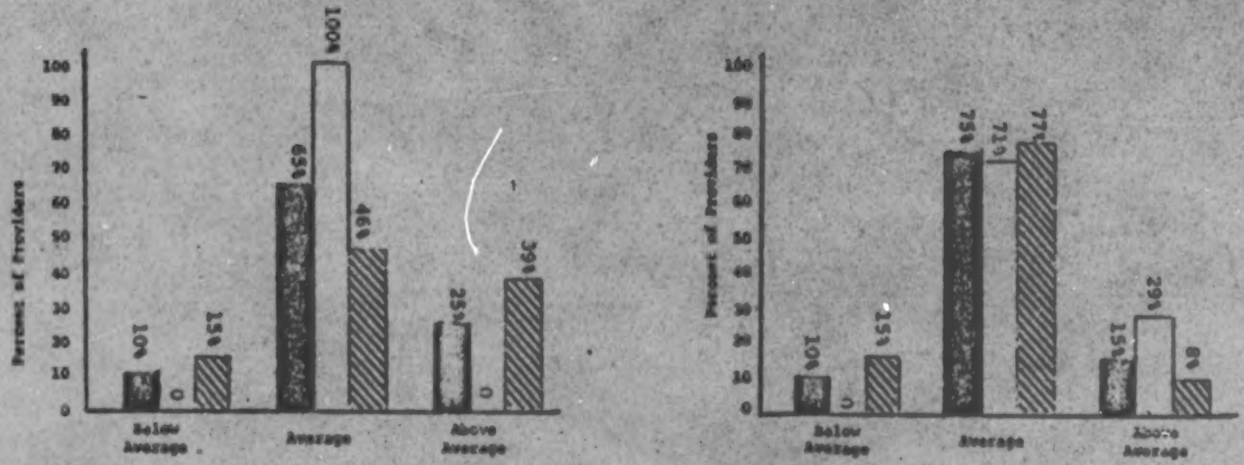
It is evident from the graphs that notable differences were observed in the types of behaviors present in day and residential providers. Low amounts of inner-directed behaviors were observed in 76.9% of the residential providers, as opposed to 42.9% of the day providers. Extremely high amounts of inner-directed behaviors were observed in 15.4% of the residential providers, while above average occurrences of these behaviors were observed in 14.3% of the day providers. Average amounts of brief and sustained staff-client interactions were more likely in the day providers. The residential providers tended to be split between the above average and average categories, with 15.4% falling in the below average category for sustained staff-client interactions.

When staff-client interactions during instructional activities were observed, the day providers tended to indicate average or above average amounts of interactions. The residential providers, however, showed much more variability. While 76.9% of the residential providers fell into the average category, others were considerably above average or considerably below average. Observations of interactions during play activities indicated that day providers showed either above average or average amounts of this behavior; the predominant percentages of the residential providers showed average or below average amounts of play interactions. There were few differences between day and residential providers in peer to peer interactions and amounts of negative affect.



"Inner-Directed" Behaviors

Brief Staff-Client Interactions

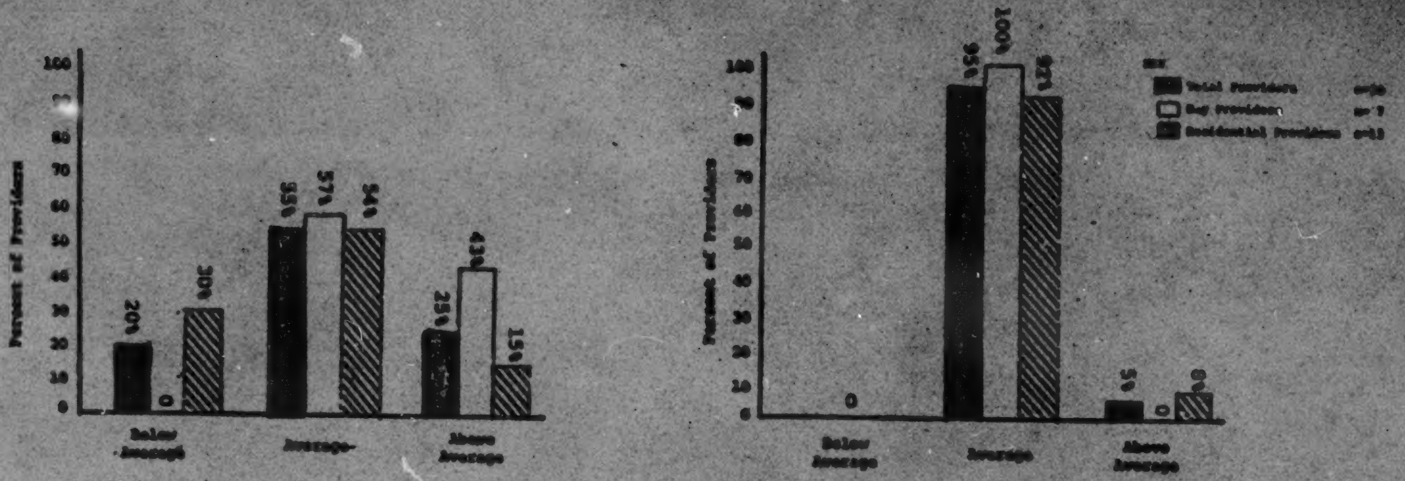


Sustained Staff-Client Interactions

Staff-Client Interactions During Instructions

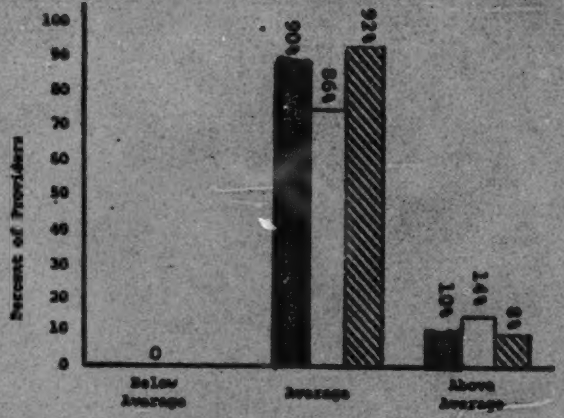
FIGURE ED-2

PREVALENCE OF SEVEN BEHAVIOR TYPES
IN PROVIDERS SERVING SEVERELY EMOTIONALLY DISTURBED CHILDREN AND YOUTH



Interactions During Play Activities

Peer-Peer Interactions



Negative Affect--Aggressive Behaviors

FIGURE III-2 (CONTINUED)

PREVALENCE OF SEVEN BEHAVIOR TYPES
IN PROVIDERS SERVING SEVERELY EMOTIONALLY DISTURBED CHILDREN AND YOUTH

5.0 QUALITY OF PROVIDERS OF SERVICES TO SEVERELY HANDICAPPED CHILDREN AND YOUTH*

5.1 Quality of Educational and Habilitative Opportunities

The quality of educational and habilitative opportunities was high in 81% of the providers serving a majority of severely emotionally disturbed children and youth. This quality indicator is based on 3 component variables:

(1) The range of educational and habilitative materials available to clients;

(2) The percent of staff time spent on educational and habilitative services; and

(3) The amount of client time spent on educational and habilitative activities.

All of the day and residential providers were of high quality in terms of the percent of staff time spent on educational and habilitative opportunities. Residential providers scored higher than the day providers on the range of educational and habilitative materials available and on the amount of client time spent on educational and habilitative activities.**

Figure ED-3 displays the distribution of day, residential and total providers on the overall quality of educational and habilitative opportunities and on the 3 component variables.

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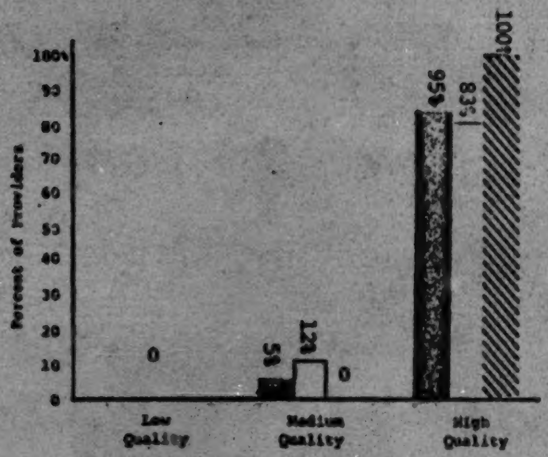
*Note: for a description of the quality model constructed for this study, see pages 10-17 of the Introduction to this volume.

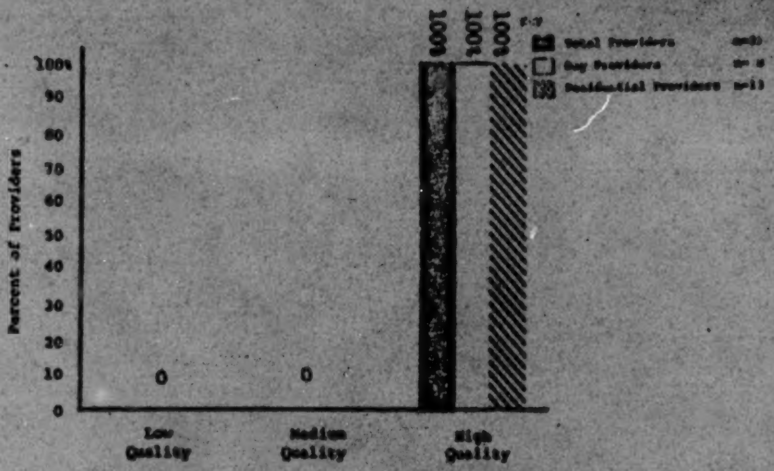
**Note: two factors should be considered in comparisons of quality between day and residential providers:

(1) No attempt was made in this study to assess the comparability of the severely handicapped populations in day versus residential providers; therefore differences in quality may actually reflect differences in the needs and characteristics of the populations served; and

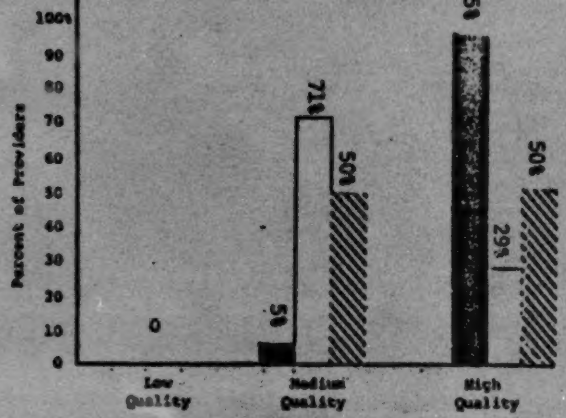
(2) Residential providers are concerned with provision of 24-hour care and are therefore different in scope and purpose from day providers, with a far heavier emphasis on basic care services.



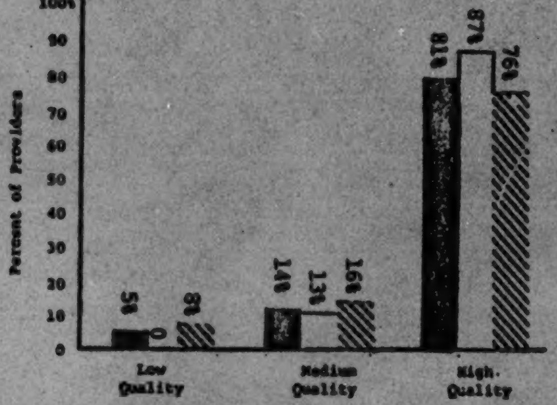
Availability of Educational Materials



Percent of Staff Time Spent on Educational/Habilitative Services



Amount of Client Time Spent on Educational/Habilitative Activities



AGGREGATE
Educational and Habilitative Opportunities

FIGURE ED-3

QUALITY OF EDUCATIONAL AND HABILITATIVE OPPORTUNITIES
IN PROVIDERS SERVING SEVERELY EMOTIONALLY DISTURBED CHILDREN AND YOUTH

5.2 Quality of Staff-Client Interactions

The quality of staff-client interactions was low in approximately three-quarters of the providers serving a majority of severely emotionally disturbed children and youth. This quality variable combines the component variables of:

(1) Warm staff-client interactions; and

(2) Instructive staff behaviors toward clients.

Day providers were of higher quality than residential providers on both of these component variables, particularly on instructive staff behaviors toward clients.

Figure ED-4 displays how day, residential, and total providers are distributed on the 2 component variables and on the overall quality of staff-client interactions.

5.3 Quality of Parent Involvement

The quality of parent involvement was high in approximately half of the providers and medium in about half of the providers. This aggregate quality variable measures:

(1) The extent of parent involvement in the planning and operation of the provider; and

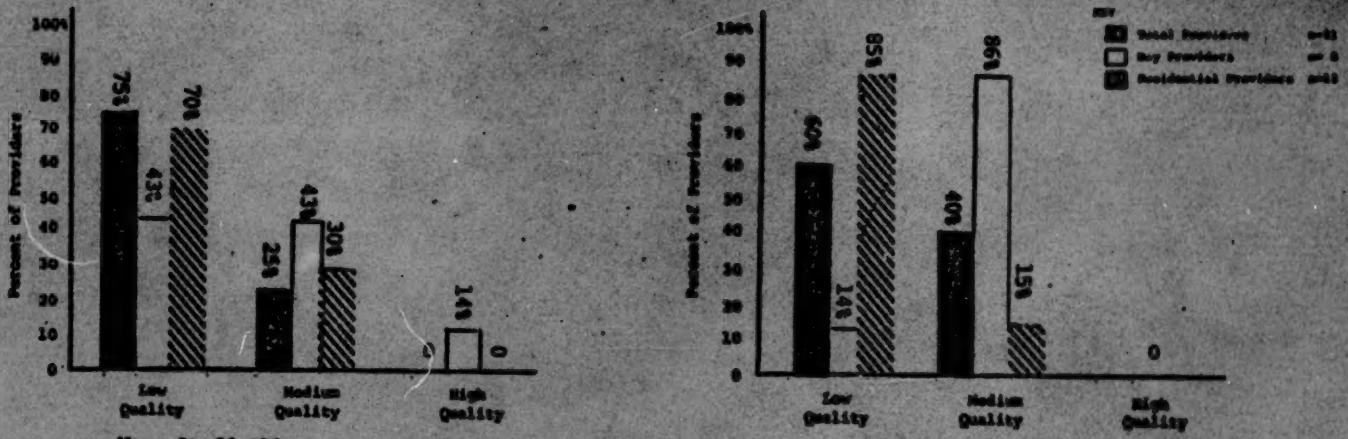
(2) Parent involvement with the handicapped clients.

Residential providers were of higher quality than day providers in terms of parent involvement with the providor. Day providers, however, scored higher than residential providers on parent involvement with the handicapped clients.

Figure ED-5 displays the distribution of day, residential and total providers on the overall quality of parent involvement and on the 2 component variables.

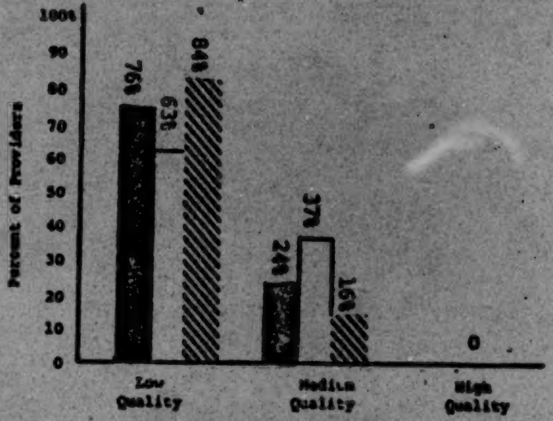
5.4 Quality of Humanization of Institutional Setting

The quality of humanization was low in 5% of the providers, medium in 57% and high in 38% of the providers. The humanization of a provider was measured by five component variables:



Warm Staff-Client Interactions

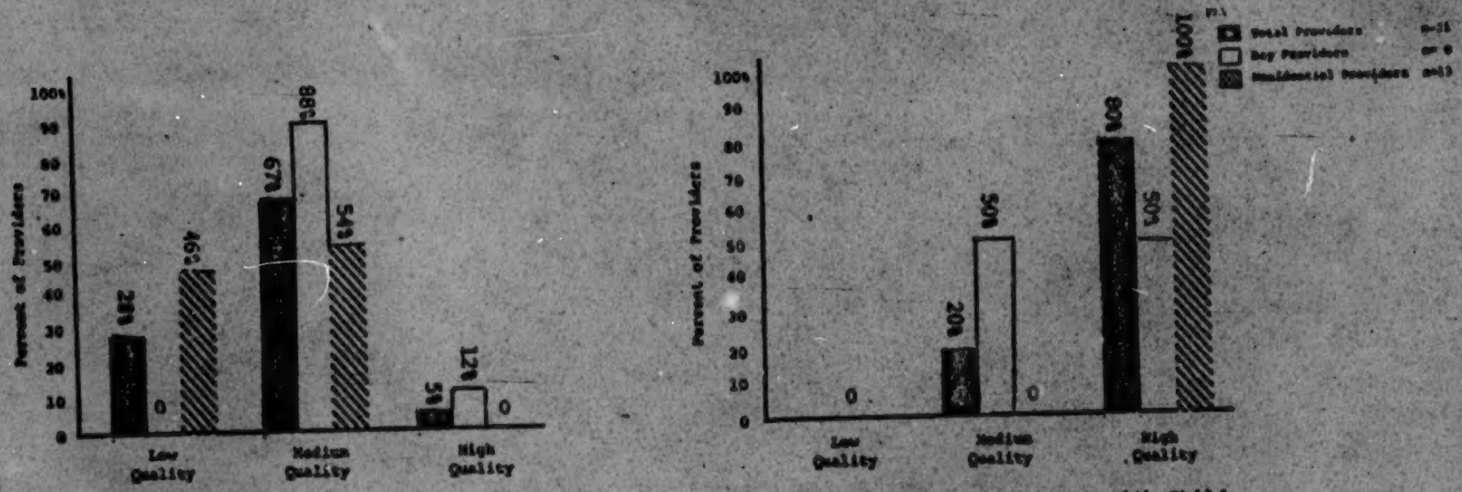
Instructive Staff Behaviors



AGGREGATE
Staff-Client Interactions

FIGURE ED-4

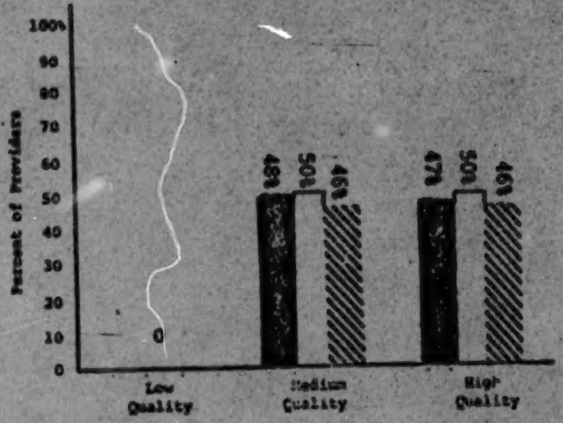
QUALITY OF STAFF-CLIENT INTERACTIONS
IN PROVIDERS SERVING SEVERELY EMOTIONALLY DISTURBED CHILDREN AND YOUTH



Extent of Parent Involvement with Provider

Extent of Parent Involvement with Child

92



AGGREGATE
Parent Involvement

FIGURE ED-5

QUALITY OF PARENT INVOLVEMENT
IN PROVIDERS SERVING SEVERELY EMOTIONALLY DISTURBED CHILDREN AND YOUTH

(1) Provider's respect for clients;

(2) Clients' privacy;

(3) Noninstitutionalized environment;

(4) Provider's policies regarding personal possessions of clients; and

(5) The physical comfort of the provider.

Day providers proved to be of higher quality than residential providers in terms of respect for clients, client privacy and physical comfort of the provider. Residential providers, however, scored higher than day providers in the area of noninstitutionalized environment. In all of the day and residential providers, the quality of the providers' policies regarding clients' personal possessions was judged to be high.

Figure ED-6 shows the distribution of day, residential and total providers on the overall quality of humanization and on each of the 5 component variables.

5.5 Quality of Extent of Training and Evaluation

The quality of extent of training and evaluation was low in 5% of the providers, medium in 57% and high in 38% of the providers primarily serving severely emotionally disturbed clients. This aggregate quality variable measures the extent to which the provider:

(1) Assesses client progress;

(2) Evaluates its educational and habilitative services and/or its overall program of services; and

(3) Offers staff training.

Day providers were of higher quality than residential providers in terms of client assessments and program evaluations conducted. The quality of staff training opportunities was approximately equal in both day and residential providers.

Figure ED-7 displays the distribution of day, residential, and total providers on the overall quality of extent of training and evaluation and on each of the 3 component variables.

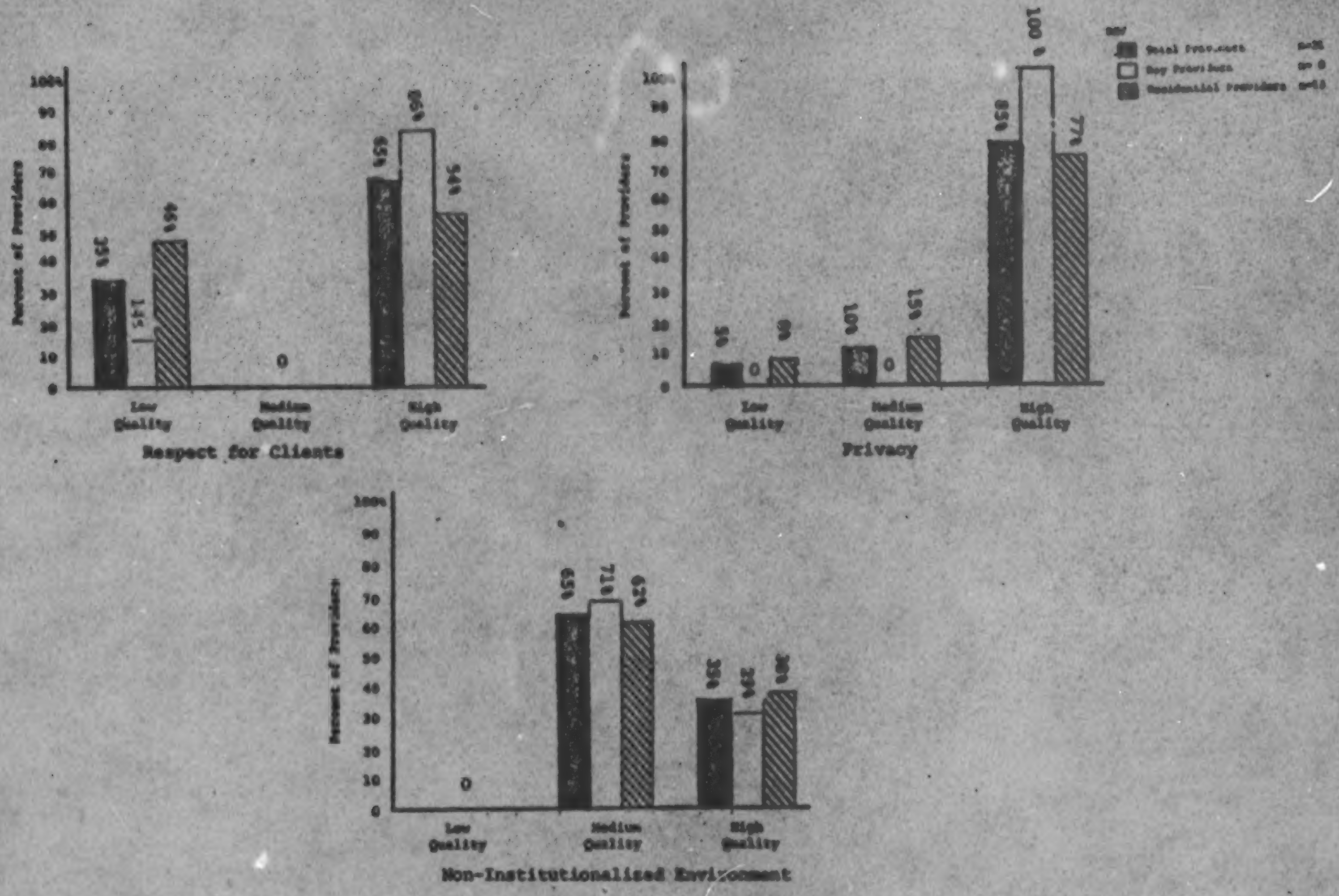
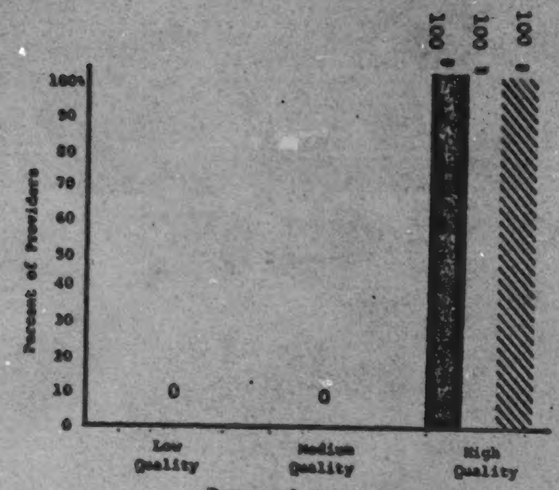
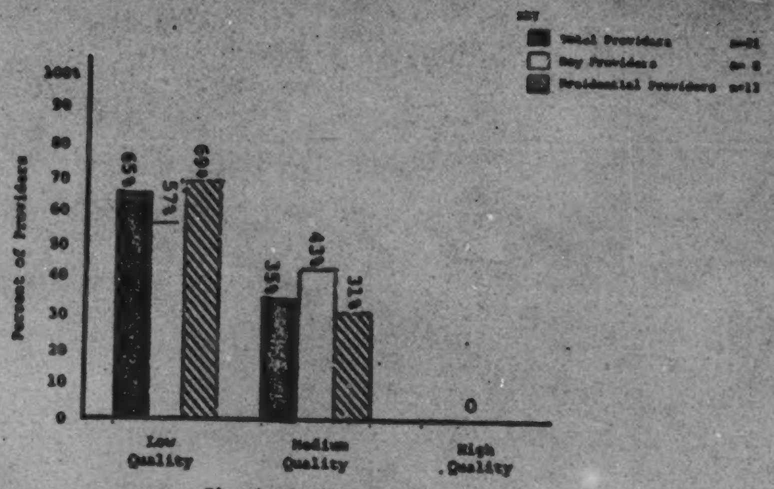


FIGURE ED-6

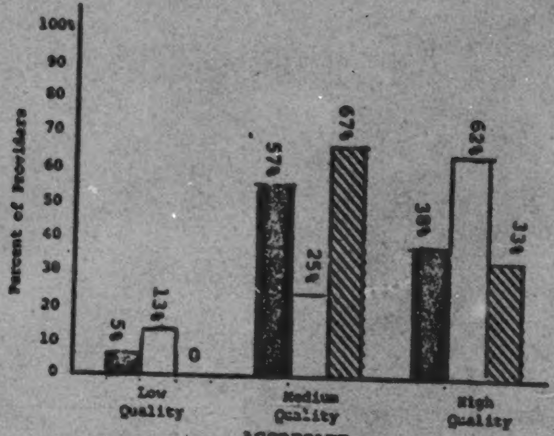
QUALITY OF HUMANIZATION OF INSTITUTIONAL SETTING
IN PROVIDERS SERVING SEVERELY EMOTIONALLY DISTURBED CHILDREN AND YOUTH



Personal Possessions



Physical Comfort

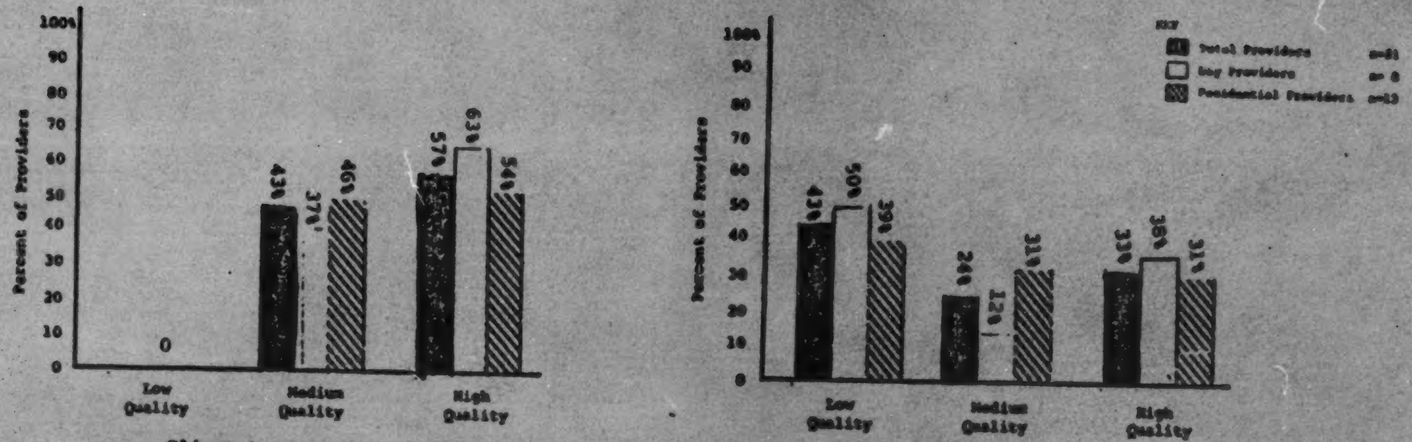


AGGREGATE

Level of Humanization

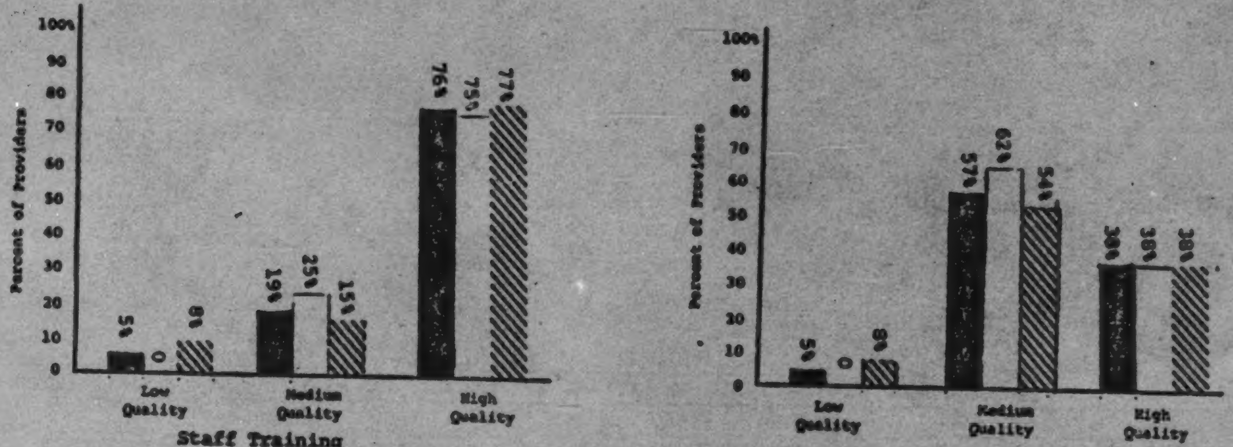
FIGURE ED-6 (CONTINUED)

QUALITY OF HUMANIZATION OF INSTITUTIONAL SETTING
IN PROVIDERS SERVING SEVERELY EMOTIONALLY DISTURBED CHILDREN AND YOUTH



Client Assessment

Program Evaluation



Staff Training

AGGREGATE
Training Evaluation

FIGURE ED-7

QUALITY OF EXTENT OF TRAINING AND EVALUATION IN
PROVIDERS SERVING SEVERELY EMOTIONALLY DISTURBED CHILDREN AND YOUTH

5.6 Quality of Evidence of Client Movement

Evidence of client movement out of the provider was of high quality in 43% of the providers, medium quality in 24%, and low quality in 33% of the providers. This aggregate variable measures:

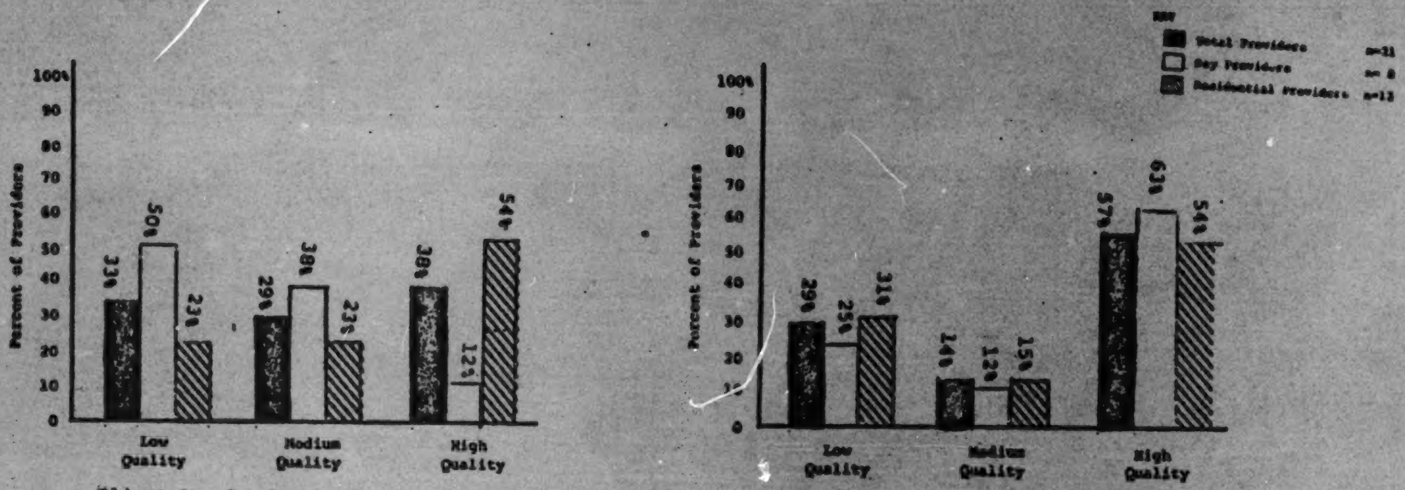
(1) The extent to which a provider has released clients because their level of functioning improved;

(2) The extent to which the provider has released clients to less sheltered settings; and

(3) The extent to which released clients are receiving educational and habilitative services following discharge from the provider.

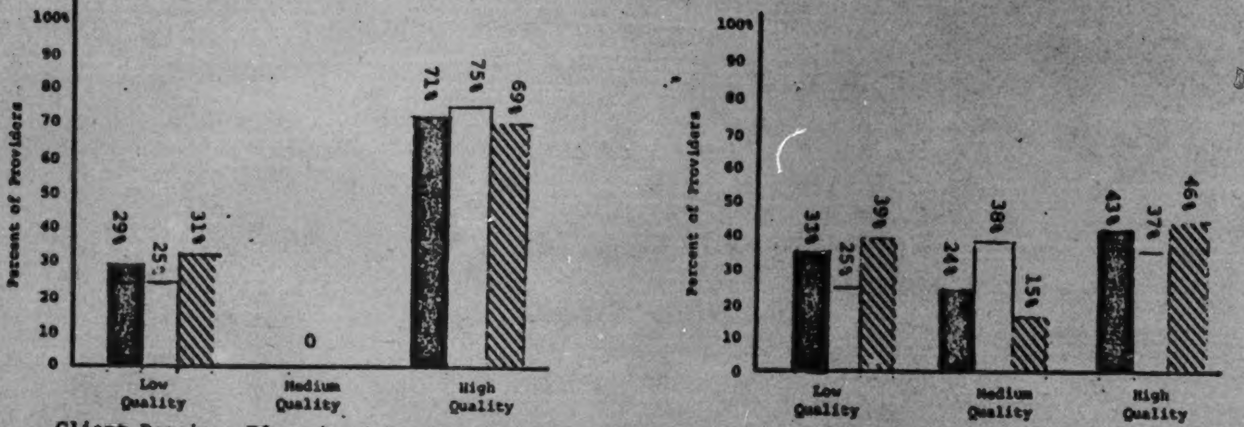
Day providers proved to be of higher quality than residential providers in terms of client movement into less sheltered settings and client's receipt of educational and habilitative services after discharge. Residential providers, however, scored higher than day providers in terms of the extent to which clients were released from the providers because their level of functioning improved.

Figure ED-8 shows the distribution of day, residential and total providers serving a majority of severely emotionally disturbed children and youth on the overall quality of evidence of client movement and on each of the 3 component variables.



Client Level of Functioning Improved

Client Movement to Less Sheltered Settings



Client Receives Educational/Habilitative Services After Discharge

AGGREGATE
Evidence of Client Movement

FIGURE ED-8

QUALITY OF EVIDENCE OF CLIENT MOVEMENT

CHAPTER IV

A CASE STUDY OF PROVIDERS OF SERVICES TO DEAF-BLIND CHILDREN AND YOUTH

1.0 SUMMARY

A total of 7 providers out of the 100 included in the study serve severely handicapped children and youth, aged 21 and under, a majority of whom are deaf and blind. Two of these providers are private nonprofit organizations and 5 are public facilities. Three of the 7 providers serve deaf-blind clients aged 21 and under on a day basis only, while 4 providers are strictly residential.

More deaf-blind clients are being admitted to the providers studied than are being discharged. Clients are discharged primarily because their level of functioning has improved, and they are generally placed in their natural homes or in residential institutions.

The majority of the providers offer a wide range of services to deaf-blind children and youth, with educational/habilitative services and basic care being the most prevalent services offered as well as the services consuming the highest percent of staff time. Ninety percent of the deaf-blind children and youth at the providers receive educational and habilitative services. On the average, each client receives 25 hours per week of education or habilitation. These services are delivered by a wide range of professionals, with psychologists and therapists spending the greatest portion of their time in this area. Training in self-help skills using behavior modification techniques is the most frequent educational/habilitative service offered across all providers.

Formal evaluations of services provided to deaf-blind clients are made regularly in 5 of the 7 providers in this group. Evaluations are conducted by internal staff in 2 providers and by accrediting/funding agencies in the others. Providers perceive their major strengths to be in the areas of staff skills and program offerings and their major weaknesses to be the need for new and expanded programs, more staff, and more parent involvement.

In 5 of the 7 providers, clients are formally assessed to determine their functional level and progress. A wide variety of standardized and provider-developed observation and progress evaluation forms are used.

The most frequently employed staff are certified teachers and aides, and attendants. Most staff are white women. All of the providers offer formal in-service training and some of the providers also offer pre-service training programs.

In 6 of the 7 providers serving deaf-blind clients, there is some form of parent involvement both with the provider and with the clients. The most frequent forms of parent participation are parent education sessions and discussions with staff about their child. The majority of the residential providers have flexible visiting rules and an average of 53% of the clients in these providers receive family visits at least once a month; an average of 48% of the clients are taken home for visits at least once a month.

In about half of the providers, the community surrounding the provider is involved with the program. The most frequent forms of community involvement include donations of goods and volunteer services to the provider.

The most frequently reported changes in provider services and characteristics over the last five years have been in the areas of staff size, enrollment size, and funding levels and sources. Providers anticipate that the future will bring increased staff sizes, increased physical facilities, and more comprehensive services.

Most observations of deaf-blind children took place in classrooms. In the majority of cases the condition of these settings was excellent. Educational activities were most frequently observed in these settings where the average staff:child ratio was approximately 1:2.

The average annual per capita cost in providers serving deaf-blind clients was $8,189. An average of 77% of this cost is attributable to personnel expenditures. Within personnel expenditures, an average of 69% of the costs can be attributed to provision of direct care to clients, which constitutes an average of 53% of the total annual per capita costs. The most important funding source for the 7 providers was the state, with federal and local government sources contributing as well.

The quality of educational and habilitative opportunities, of parent involvement, and of extent of training and evaluation was high in the majority of providers; while the quality of staff-client interactions and of humanization of institutional setting was medium in the majority of cases. Evidence of client movement out of the provider was judged to be of low quality in most of the providers.

The major differences that emerged between day and residential providers were that, overall, residential providers are of higher quality; day providers cost less per capita.*

2.0 OVERVIEW

A total of 7 providers out of the 100 included in the study serve severely handicapped children and youth, aged 21 and under, a majority of whom are legally deaf and blind.** Two of these providers are private nonprofit organizations and 5 are public facilities.

Three of the 7 providers serve deaf-blind clients aged 21 and under on a day basis only, while 4 providers are strictly residential. No providers serve clients on both a day and residential basis.

Although the 7 providers serve a majority of clients whose primary disability is that they are legally deaf and blind, numerous multiply-handicapped clients are also served in these settings.

The major goal which these providers hope to achieve with deaf-blind clients is socialization. To this end, appropriate vocational and behavioral skills are stressed. To the extent that clients demonstrate a readiness to satisfy intellectual needs, academic skills are taught.

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*Note: two factors should be considered in comparisons of quality between day and residential providers:

(1) No attempt was made in this study to assess the comparability of the severely handicapped populations in day versus residential providers; therefore differences in quality may actually reflect differences in the needs and characteristics of the populations served; and

(2) Residential providers are concerned with provision of 24-hour care and are therefore different in scope and purpose from day providers, with a far heavier emphasis on basic care services.

**Note: when the term "providers" is used throughout this case study, the referent is the 7 providers which serve a majority of deaf-blind clients, aged 21 and under.

Perhaps the most important early training goals for this group involve refinement of physical skills such as motor coordination and sensory perception; attention is given to whatever residual auditory or visual capacity may exist in the client.

All providers attempt to supply clients with basic self-help and verbal or nonverbal communication skills, and most approach instruction on an individualized basis.

Family involvement is solicited and frequently parents are included on advisory and policy-making boards as well as in program development. In some cases parents do volunteer work. This proximity serves a number of purposes. It is designed to sustain a connection between provider and home, between home and client, and to educate the family to the special needs of the client and to a realistic acceptance of their child.

Some providers view their work as experimental and have a long range goal of program evaluation for the purpose of developing increasingly appropriate service for this specialized group. Five of the 7 providers which primarily serve legally deaf-blind clients are on the east coast. Three of the facilities are in urban areas, 2 are in rural areas and 2 are located in the suburbs.

3.0 CHARACTERISTICS OF PROVIDERS

3.1 Client Characteristics

In 6 of the 7 providers serving deaf-blind clients, there are no mandated age limits for admittance. The average age of the youngest group admitted is approximately 5 years; the average age of the oldest clients admitted is 16 years. Currently, the age range of deaf-blind clients presently being served at the facilities is between 0 and 21 years.

The distribution of clients by ethnicity is shown in Table DB-1.

Table DB-1

Ethnic Distribution of Clients

Ethnic origin	Average % of provider population	Range
White	69%	50-100%
Black	26%	0- 40%
Spanish surname	5%	0- 17%
American Indian	0%	----
Oriental	0%	----
Other	0%	----

In most situations, little more than half the population is male (54% average) with a range of from 33% to 86%. The female population accounts for an average of approximately 46% with a range of from 14% to 67%.

The average estimates of time needed for clients to reach self-sufficiency in toileting, dressing and self-feeding skills is approximately 3 years. It is estimated that clients in day providers could reach self-sufficiency in 2.5 years. The average length of stay for clients in residential providers is 9 years; the average stay for clients in day providers is 4 years, 5 months.

3.2 Enrollment

3.2.1 Admission

Many providers which primarily serve clients who are deaf-blind are mandated to serve persons with particular types of disabilities with specified levels of severity. The most frequent mandates reported by providers are to serve legally deaf-blind clients (6 providers), severely handicapped clients (5 providers), and moderately handicapped clients (2 providers). The average number of persons applying for admission to these providers between July, 1973 and May, 1974 was 9, with a range from 1 to 25 applicants across the total group. The acceptance rate was approximately 71% across the 7 providers, or 8% of currently enrolled severely handicapped children and youth.

Type of disability, severity level of disability and client age are frequently mandated acceptance criteria. A variety of other requirements for admission to specific providers range from requirements stipulating proof of financial support to indications of a certain level of client intelligence. In many providers only state residents are eligible for admission.

Parental proximity is such an important factor that there is at least 1 day provider which will not work with clients who do not reside with their families. Clients must be living at home for the purpose of maximizing the advantages gained by close family involvement. More practical criteria require the client to be ambulatory or partially ambulatory and not in need of constant medical attention.

Three of the 7 providers which primarily serve deaf-blind clients currently maintain a waiting list for their services. These providers, which are residential, have an average number of 6 persons waiting, and an average waiting period of 8 months. Two providers have a minimum and maximum length of enrollment for clients (5 months minimum; 24 years maximum).

Given their current resources, 2 of the 7 providers feel that they could serve more clients (on the average, 2 more clients); 4 providers feel that they are currently operating at full capacity; and 1 feels that it should be serving fewer clients.

3.2.2 Discharge

In 4 of the providers, no clients were discharged between July, 1973 and May, 1974. The total number of clients discharged from the remaining 3 providers during that period was 30. The majority of these clients were discharged because their functional level had either improved or deteriorated.

In providers offering only day services, the majority of the discharged clients were placed in residential institutions (79%). The largest group of clients discharged from residential providers were returned to their natural homes (83%).

Of the clients who have been discharged, 71% from day providers and 67% from residential providers are currently receiving educational or habilitative services. Of those clients discharged from day facilities who are receiving educational or habilitative services, 71% are now receiving them at residential facilities, and 29% at local schools. Of the discharged residential clients who are now receiving educational/habilitative services half are receiving these services at local schools and half are in specialized day programs.

3.3 Services Offered to Severely Handicapped Children and Youth*

The majority of the 7 providers which primarily serve deaf-blind children and youth offer a wide range of services to this client group. Table DB-2 displays the type of service provided, the percent of providers offering the service and the average percent of staff time spent in providing the service to deaf-blind clients. As reported in providers serving deaf-blind clients, staff spend the greatest portion of their time providing educational/habilitative services and basic care services to this client group.

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*Note: for a description of the 7 service components and the 12 staff categories used in the study, see pages 4-7 of the Introduction to this volume.

Table DB-2

Services Offered to Severely Handicapped Clients

Service component	Percent of providers offering the component			Average staff time spent providing the service		
	Total n=7	Day n=3	Residential n=4	Total n=7	Day n=3	Residential n=4
Basic care	100%	100%	100%	24%	15%	31%
Educational/habilitative services	100%	100%	100%	54%	51%	55%
Medical services	29%	33%	25%	1%	1%	1%
Family and community services	57%	67%	50%	3%	7%	1%
Diagnostic and referral services	86%	100%	75%	6%	11%	2%
Administration	57%	67%	50%	7%	11%	4%
Support services	71%	33%	100%	7%	2%	10%

A greater percent of day providers offer the full range of services than do residential providers. In providers offering only day services, staff reportedly spend 8 times as much time providing family services as do staff in residential providers (which operate 24 hours per day, 7 days per week); 5 times as much time on diagnostic/referral services, almost 3 times as much time on administrative services and one-tenth as much time on support services.

3.3.1 Educational and habilitative services offered to severely handicapped children and youth

All of the 7 providers which primarily serve deaf-blind clients offer educational and habilitative services. Ninety percent of the severely handicapped population at the providers receive these services. On the average, each client receives 25 hours per week of education or habilitation.

These services are delivered by a variety of professionals, as shown in Table DB-3. As reported in providers serving deaf-blind clients, psychologists and therapists are the professionals who spend the greatest portion of their time delivering educational and habilitative services.

Table DB-3

Percent of Educational/Habilitative Services Delivered by Staff

Staff Category	Percent of educational/ habilitative services delivered		
	Total n=7	Day n=3	Residential n=4
Teacher (certified)	39%	41%	38%
Teacher (noncertified, aide)	38%	44%	34%
Attendant	15%	0%	26%
Nurse	.1%	0%	.2%
Therapist	7%	15%	1%
Social worker	0%	0%	0%
Psychologist	.2%	0%	.4%
Psychiatrist	0%	0%	0%
Medical doctor	0%	0%	0%
Administrator	0%	0%	0%
Support staff	0%	0%	0%
Other staff	0%	0%	0%

In day providers, 77% of deaf-blind clients receive education and habilitation, while 100% of these clients receive such services in residential providers. In day providers, each client receives these services 16 hours per week, while clients in residential providers receive education or habilitation 33 hours per week.

Among day providers, 85% of the educational/habilitative services are delivered by teachers and teacher aides; therapists deliver the remaining 15%. In residential providers, teachers and teacher aides deliver 72% of the educational/habilitative services, with attendants delivering 26%.

The most common educational/habilitative objective across the 7 providers serving deaf-blind clients is concerned with developing client skills in self-care and independence toward integration into society.

Table DB-4 displays the types of educational/habilitative instruction offered to deaf-blind clients.

Table DB-4

Skills Training Offered to
Severely Handicapped Clients

Instructional area	Number of providers offering skill training		
	Total n=7	Day n=3	Residential n=4
Communication skills	5	3	2
Self-help skills	6	3	3
Pre-academic skills	2	0	2
Sensory awareness	4	1	3
Social skills	5	2	3
Academic skills	4	2	2
Recreation skills	3	0	3
Music therapy	3	1	2
Art therapy	3	2	1
Physical education	5	2	3

Therefore, as reported, training in self-help skills is offered most frequently across all providers.

The educational techniques used by providers to achieve their educational/habilitative objectives are varied, as shown in Table DB-5. As shown in the table, behavior modification is used in all providers to teach deaf-blind clients a variety of functional skills.

Numerous extracurricular activities, both instructional and recreational, are offered to deaf-blind clients at the 7 providers. These include field trips (2 providers) and speech therapy (3). Physical therapy, arts and crafts and audiology sessions are offered by 2 of the providers.

Table DB-5

Educational/Habilitative Techniques
Used by Providers

Educational/habilitative technique	Number of providers using technique
Behavior modification	7
Individual attention	3
Modelling	2
Signing	2
Task analysis	1
Specially designed materials	1

3.3.2 Staff perceptions of resources available to clients

3.3.2.1 Materials. The overwhelming majority of the 7 providers serving deaf-blind clients provide a wide array of materials to this client group. All providers offer toys, games, building materials, large motor equipment, books and magazines, and writing and drawing materials.

All providers report a sufficient supply of animals, toys, building materials, and writing and drawing materials. Items in least supply are musical instruments.

Most accessible (i.e., available at all times) to clients are building materials, books and magazines, and writing and drawing materials. Least accessible items are toys and games.

3.3.2.2 Possessions. All of the 4 residential providers serving deaf-blind clients report that those clients have their own clothing which is returned to them following laundering.

Members of this client group also possess other personal articles (such as radios, stuffed animals, toys, etc.) in all the residential providers sampled. All residential providers report that deaf-blind clients have private storage areas available to them for storing personal articles.

3.3.2.3 Work opportunities for clients. Three of the 7 providers serving deaf-blind clients offer those clients the opportunity to earn money or credits. One provider reports that deaf-blind clients earn from $1 to $5 per week; clients earn credits in 2 providers.

Deaf-blind clients acquire money or credits by performing various tasks, as shown in Table DB-6.

Table DB-6

Work Performed by Severely Handicapped Clients for Money or Credits

Type of work performed by client	No. of providers where money is earned	No. of providers where credits are earned
Sheltered workshop	1	-
Janitorial	1	1
Food service	-	1
Housekeeping	1	1
Good behavior	-	2
Grounds & maintenance	1	-

No differences in the types of tasks performed by this client group to earn money or credits are reported in day, as opposed to residential, providers.

3.4 Evaluation

3.4.1 Evaluation of provider services

Formal evaluations of services provided to deaf-blind clients are made regularly in 5 of the 7 providers in this group. In the remaining 2, no service components have been evaluated to date. Evaluations are conducted by internal staff in 2 providers and by accrediting/funding agencies in the others. Evaluation results are most often used for program development, for setting behavioral objectives, and for obtaining funding or refunding.

The findings of evaluations conducted between May, 1973 and May, 1974 on the educational and habilitative services of 3 of these providers were generally positive, although weaknesses were identified in some specific areas, e.g., student grouping, self-evaluation, and communication with families.

Directors of the providers serving primarily deaf-blind clients most often perceive the major strength of their program to be staff who are skilled, innovative and dedicated. Specific program offerings (e.g., total therapy program for very young children, prevocational and vocational training) are mentioned as major strengths, as are working relationships with outside rehabilitation facilities and area colleges. Major weaknesses as perceived by the directors of these providers include needs for new and/or expanded programs (preschool, vocational), more client contact with nonhandicapped peers, more parent involvement, more staff, and higher staff salaries. Needs for long range assessments, formal evaluations and goal definition are also mentioned as weaknesses. In most cases efforts are being made to overcome weaknesses by strengthening parent/community contacts and by actively seeking program and staff support funds.

3.4.2 Client assessment

Clients are formally assessed to determine their level of functioning and progress in 5 of the 7 providers serving a majority of deaf-blind clients. The areas of regular client assessment and the ranges and mean percentages of clients assessed across these providers is displayed in Table DB-7 below.

Most of these providers use the same procedures for assessment of all their clients; procedures include standardized intelligence tests, development and achievement tests (including Stanford-Binet, Weschler, Leiter, Peabody, Azusa and Denver Developmental, and Bobath neuro-developmental) as well as provider-developed observation and progress evaluation forms.

Assessment results are used in all of the providers assessing their deaf-blind clients to develop instructional programs. In 3 of these providers assessment results are used to evaluate program components, and in 2 to measure client progress. Results are sometimes sent to parents, doctors and funding agencies as well.

Table DB-7

Client Assessment

Assessment area	Mean % of clients assessed	Range of clients assessed
Self-sufficiency	97%	80-100%
Communication	90%	40-100%
Social and/or emotional competence	97%	80-100%
Intelligence	95%	80-100%
Academic Skills	72%	0-100%
Other (e.g., vision & hearing, motor development)	70%	0-70%

3.5 Provider Staff Characteristics

The average *per capita* number of full-time equivalent staff (based on a 40-hour work week) who work with severely handicapped deaf-blind children and youth in these providers are shown for each of 11 staff categories in Table DB-8 below. Certified teachers and aides hold the highest ratios to clients (1:6 and 1:4, respectively) among day providers of this group. Attendants have the highest ratio to clients in the residential providers (1:2), and certified teachers have the next highest ratio (1:3). Staff:client ratios among residential providers are higher than those of the day providers in all categories except noncertified teacher, therapist and social worker.

DB-8

Average Full-Time Equivalent Staff per Client

Staff category	Average full-time equivalent staff per client		
	Total n=7	Day n=3	Residential n=4
Teacher (certified)	.26	.15	.34
Teacher (noncertified, aide)	.21	.27	.17
Attendant	.31	-0-	.53
Nurse	.008	-0-	.01
Therapist	.03	.03	.02
Social Worker	.004	.006	.003
Psychologist	.001	-0-	.001
Psychiatrist	-0-	-0-	-0-
Medical doctor	.001	-0-	.002
Administrator	.08	.03	.11
Support staff	.12	.02	.20

The total number of overtime hours per week worked by staff across these providers ranges from 0 to 42, with an average of 15 hours per week. Teachers work the most overtime in 5 of the 7 providers.

The percentage of women staff members among these providers ranges from 71% to 96%, with a mean of 82%. Nonwhite staff across all 7 providers ranges from 0 to 60% with a mean of 29%. Among day providers in this group, nonwhite staff averages 8%, while among residential providers the average is 45% nonwhite staff.

Formal in-service training is provided for staff members (professional staff, houseparents, aides) in all of the providers serving deaf-blind clients. Pre-service orientation workshops take place in 3 of the providers, in-service training (e.g., sign language courses, workshops, seminars) is offered in 4 and funding for course work taken by staff is available in 4 (3 residential providers and 1 day provider).

3.6 Parent Participation and Community Involvement in the Providers

3.6.1 Parent participation

In 6 of the 7 providers primarily serving deaf-blind children, parents participate in various aspects of the program. The most frequent forms of parent participation cited by the directors are participation in parent education sessions (69% of parents participate in this activity across providers) and discussions with staff about their child (70% of parents). An average of 32% of the parents assist in the development of instructional programs for their child and 36% of the parents are members of parent groups. According to staff estimates, an average of 46% of the parents are members of parent groups. According to staff estimates, an average of 46% of the parents across providers participate in the planning and delivery of services to their child. Most of the staff interviewed estimate that parent involvement has a moderate impact on a child's progress.

Figure DB-1 displays the types and amounts of parent involvement in day and residential providers serving deaf-blind children. In 3 of the 4 residential providers serving deaf-blind children, parents can visit their child at any time. In 1 residential provider, parents may visit their child only during visiting hours or by appointment. An average of 53% of the clients in these providers receive family visits at least once a month. Staff estimates that an average of 4% of the clients are never visited by their families.

Public transportation to and from the residential providers is available at least once an hour in 1 provider, less than once an hour in 2 providers, and is not available at all in 1 provider. Parents use private cars as the major means of transportation for visiting their child in all 4 of the residential providers.

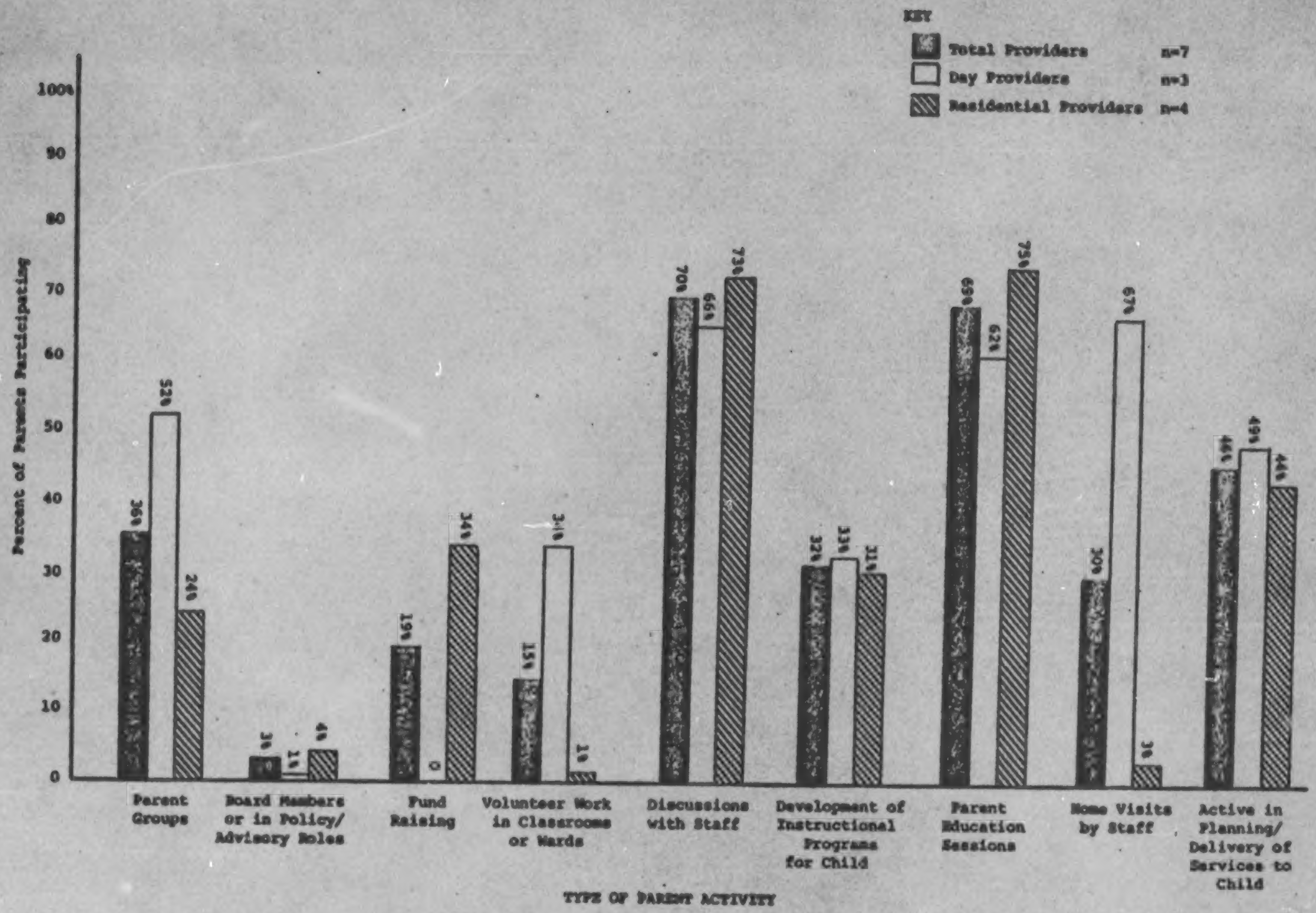

FIGURE DB-1

EXTENT OF PARENT INVOLVEMENT
IN PROVIDERS SERVING DEAF-BLIND CHILDREN AND YOUTH

An average of 48% of the deaf-blind clients are taken home for visits at least once a month; 37% are taken home less than once a month and an average of 15% of the clients never make home visits. Some providers have offered free transportation to the parents as a means of encouraging families to take their child home for visits. Other providers have written letters to the families, informing them of their child's activities and urging home visits.

3.6.2 Community involvement

There are opportunities for deaf-blind clients to interact with nonhandicapped adults and peers in 2 of the 7 providers. Within the provider facility, clients are exposed to volunteers from the community, foster grandparents, children of staff members, and the parents of other clients. In the community surrounding the provider, clients go on field trips, attend church services and athletic events.

Four of the 7 providers serving deaf-blind children receive some goods and services which are donated by the community. Donated goods include cash contributions, music and recreational equipment, clothing, furniture, and physical space. Some of the services contributed include screening and evaluation, training, transportation, and interior decorating. Most of the providers try to encourage community involvement in the provider by offering tours of their facilities, publishing newsletters and monographs, obtaining media coverage on television and radio, providing speaking engagements to civic and professional groups, and conducting fund raising appeals.

Volunteers work regularly in 4 of the 7 providers. The average number of regular volunteers across providers is .49 per client, with a range from .02 to 1.8 volunteers per client. These volunteers work a mean per capita total of 1.9 hours per week, ranging from an average per capita total of .06 hours to 6.5 hours. Jobs performed by volunteers include assistance in instruction, feeding and basic care of clients, one-to-one relationships with clients, and transportation of clients. Some providers use student teachers and student nurses as volunteers.

3.7 Changes in Provider Services

According to the directors of the 7 providers primarily serving deaf-blind children and youth, there have been important changes in provider characteristics and services over the past 5 years. In 5 of the 7 providers, changes have occurred in enrollment size (increases), funding level and sources (increases), physical size (increases), range of services offered (more comprehensive), and educational approach (more individualized, more structured). In all of the providers which serve a majority of deaf-blind clients, the number of staff has increased over the past 5 years. In most providers, policy control and management, discharge criteria, and the ages and sex of clients served have remained relatively stable.

A greater number of changes occurred in the residential providers over the past 5 years than in the day providers. Residential providers reported decreases in length of enrollment, increases in severity of handicaps served, lower ages of clients served, more discharge alternatives, and changes in philosophical orientation toward deinstitutionalization; no changes were reported in these areas by the day providers.

Some of the future changes anticipated by the directors include: increased staff size, increased size of physical facilities, service to a greater number of severely handicapped clients, and more personalized, smaller living arrangements. Directors of 3 of the 7 providers stated that additional facilities would be needed if their client population were to increase by 25%.

Four of the 7 providers feel that recent state and federal legislation will affect their programs. Specifically, mandatory right-to-education laws were mentioned by several directors as laws which will potentially affect the types of handicapped clients served and the level of severity of these clients' handicapping conditions.

4.0 OBSERVATION OF SEVERELY HANDICAPPED CHILDREN AND YOUTH AND THE STAFF SERVING THEM*

4.1 Description of Settings Observed

Two hundred seventy time-sampled observations were taken in various settings within the 7 providers which primarily serve deaf-blind children. The most frequent settings in which observations took place were classrooms (61% of the observations). Other settings which were observed in order of frequency were: dining facilities, living rooms or day rooms, outside areas such as playgrounds, auditoriums and gyms, therapy rooms, wards, bedrooms and bathrooms.

In 73% of the observations, the interiors of the buildings were in excellent repair; in the remaining observations, the interiors were moderately well maintained. The odor in the settings was neutral in 90% of the observations. In those settings with sleeping areas, there were private sleeping accommodations in 39% of the observations and somewhat private sleeping areas in 54% of the observations. The sleeping areas were not private at all in 7% of the observations. Very private toileting areas were noted in 63% of the observations and somewhat private areas in 25%; toileting areas were not private at all in 12% of the observations. In most of the observations, the level of institutionalization (homelike versus sterile environment) was low (69%); in 27% of the observations, the level of institutionalization was moderate and in 4% it was noted as high.

There were many differences observed in the day and residential providers which serve a majority of deaf-blind clients. In all of the observations of day providers, the interior of the setting was in excellent repair; in residential providers, the interior was in excellent repair in only 58% of the observation cases. Noxious odors were 4 times as frequent in residential providers as in day providers. Day providers had very private toileting areas in 97% of the observations; in residential providers, only 36% of the observations noted very private toileting areas.

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*Note: for a description of observation procedures used in the study and operational definitions of items on the Observation Schedule, see pages 8-10 of the Introduction to this volume.

4.2 Description of Activities Observed

There were a variety of activities underway during the observations taken in the providers serving deaf-blind children. Table DB-9 lists the types of activities and the corresponding percent of observations in which these activities occurred. No organized activities were observed in 9% of the observations. Vocational and basic care activities were not observed in any of the settings. The activity level was low in 26% of the observations, moderate in 37%, and high in 37% of the observations. Operant conditioning was observed in 19% of the observations.

Play and learning materials were available in adequate numbers in 83% of the observations; in 8% of the observations there were few materials available and in 9%, there were no materials available to deaf-blind clients. In those settings with play and learning materials, the materials were typically in excellent condition and of high quality.

TABLE DB-9

Types of Activities Observed

Type of activity	Frequency of occurrence (Percent of total observations)
Educational	41%
Mealtime, snacktime	14%
Recreational	11%
Free Play	11%
Naptime	6%
Self-care	6%
Therapy	2%

In 62% of the observations, male and female clients were grouped together in the various settings. Clients were grouped homogeneously with persons of similar levels of disability in 92% of the observation cases. In 91% of the cases, clients were adequately clothed. The average number of clients in a setting was 6, with a range of from 1 to 51. The average number of staff per setting was 3, with a range of from 0 to 12. The average staff:child ratio was 1:2 with a range of from 2:1 to 1:13.

The activities of day and residential providers differed in several respects. Educational activities were about 1.5 times more frequently observed in residential providers than in day providers. No therapy activities were observed in residential providers, whereas in day providers, therapy accounted for 6% of the observations. A high activity level was more than twice as frequent in day as opposed to residential providers. Play materials were more available, in better condition, and of higher quality in day providers than in residential providers. In all of the observations of day providers, clients were adequately clothed. However, in residential providers, 14% of the observations indicated that deaf-blind clients were in ill-fitting, unclean, and/or inappropriate clothing.

4.3 Description of Clients and Staff Observed

The systematic observations within 79 settings in the 7 providers of services to deaf-blind clients indicated that there were 7 distinct types of behavior taking place between clients (peer to peer) and between clients and staff including:

(1) "Inner-directed" behaviors on the part of the clients -- clients acted without observable external cause or interaction with their environments;

(2) Brief staff-client interactions;

(3) Sustained staff-client interactions;

(4) Interactions between clients and staff during instructional activities;

(5) Interactions between clients (peer to peer) and clients and staff during play activities;

(6) Peer to peer interactions; and

(7) Negative affect on the part of clients -- aggressive behavior.

Figure DB-2 depicts the prevalence of each of the 7 behavior types in day, residential and the total groups of providers serving deaf-blind clients, compared with the average across all providers in the study.

The graphs indicate that there were a few notable differences between types of behaviors present in the day, as opposed to the residential, providers. There was considerable variability in the amount of "inner-directed" behavior occurring in the residential providers; 25% of the residential providers showed extremely high amounts of this behavior, while none of the day providers did.

Whereas all of the day providers indicated average amounts of sustained staff-client interactions, one-third of the residential providers fall into the below average category on this type of behavior. A slightly higher percentage of the residential providers also indicated an average amount of interaction during play activities. Day and residential providers showed average amounts of interaction in the remainder of the identified behaviors.

5.0 QUALITY OF PROVIDERS OF SERVICES TO SEVERELY HANDICAPPED CHILDREN AND YOUTH*

5.1 Quality of Educational and Habilitative Opportunities

The quality of educational and habilitative opportunities was high in 86% of the providers which serve a majority of deaf-blind children and youth and low in 1 of these providers. This quality indicator is based on 3 component variables:

(1) The range of educational and habilitative materials available to clients;

(2) The percent of staff time spent on educational and habilitative services; and

(3) The amount of client time spent on educational and habilitative activities.

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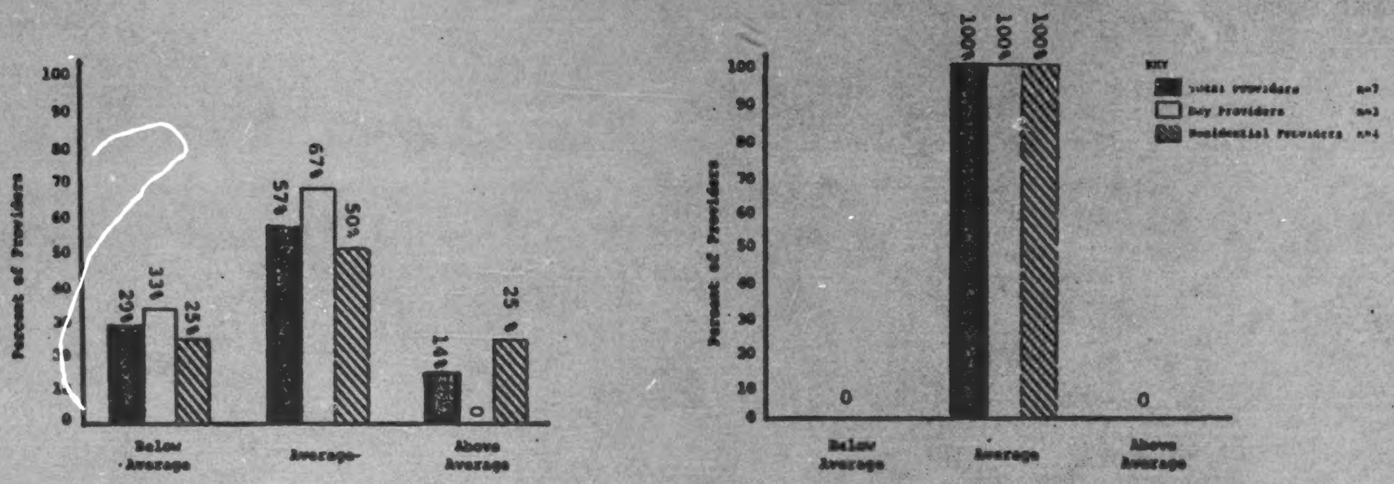
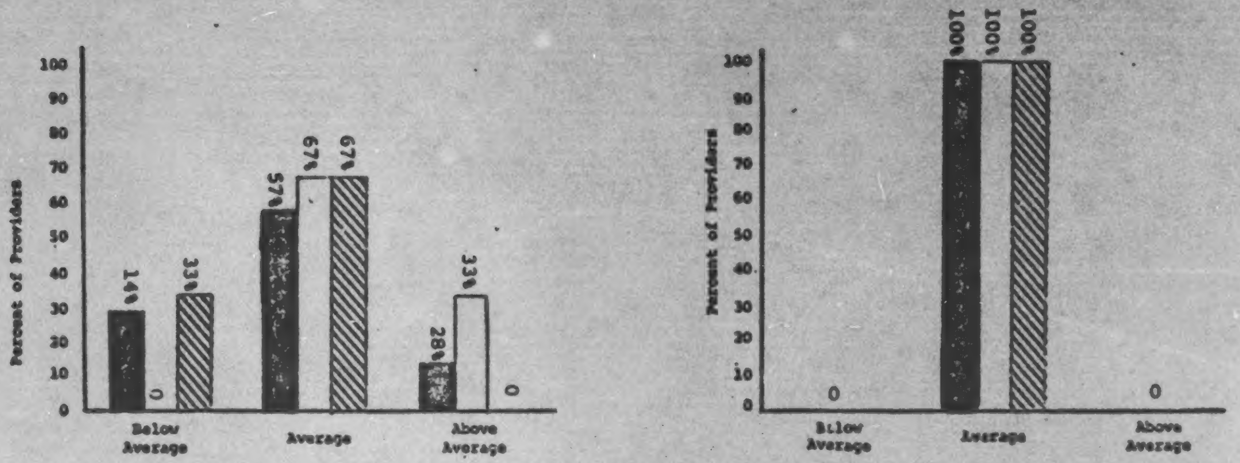
*Note: for a description of the quality model constructed for this study, see pages 10-17 of the Introduction to this volume.



"Inner-Directed" Behaviors

Brief Staff-Client Interactions

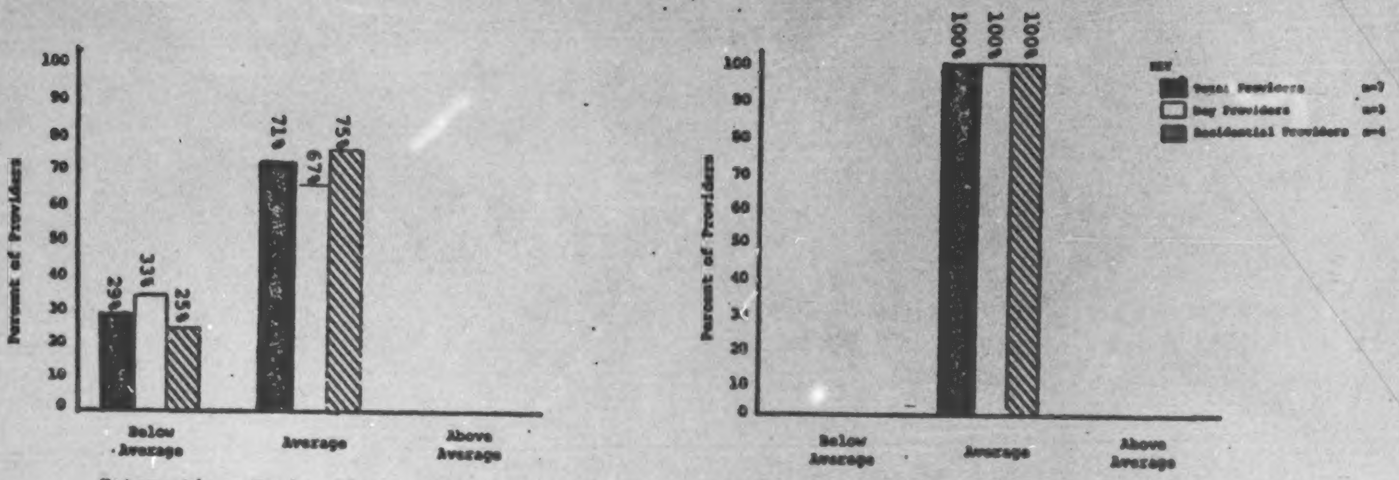


Sustained Staff-Client Interactions

Staff-Client Interactions During Instructions

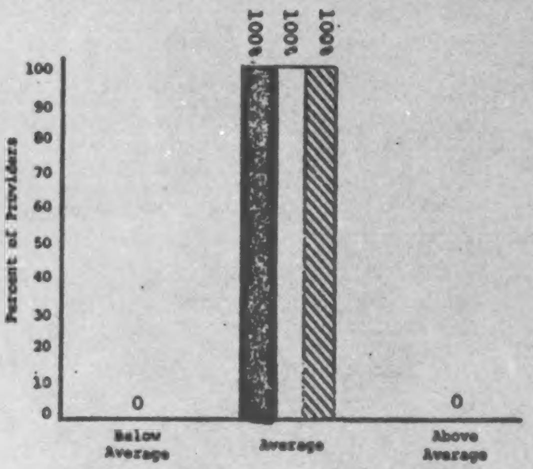
FIGURE DB-2

PREVALENCE OF SEVEN BEHAVIOR TYPES
IN PROVIDERS SERVING DEAF-BLIND CHILDREN AND YOUTH



Interactions During Play Activities

Peer-Peer Interactions



Negative Affect--Aggressive Behavior

FIGURE DB-2 (CONTINUED)

PREVALENCE OF SEVEN BEHAVIOR TYPES
IN PROVIDERS SERVING DEAF-BLIND CHILDREN AND YOUTH

The residential providers scored higher than the day providers on each of these component variables, particularly on the amount of client time spent on educational and habilitative activities. Figure DB-3 displays the distribution of day, residential and total providers on the overall quality of educational and habilitative opportunities and on the 3 component variables.*

5.2 Quality of Staff-Client Interactions

The quality of staff-client interaction was medium in 5 of the providers and low in 2 of the providers. None of the providers were of high quality on this variable which combines the component variables of:

(1) Warm staff-client interactions; and

(2) Instructive staff behaviors toward clients.

Day providers were of higher quality than residential providers in terms of warm staff-client interactions. Residential providers, however, scored higher than day providers on instructive staff behaviors toward clients. Figure DB-4 displays the distribution of day, residential, and total providers on the overall quality of staff-client interaction and on the 2 component variables.

5.3 Quality of Parent Involvement

The quality of parent involvement was high in 5 of the providers primarily serving deaf-blind children and youth and low in 2 of these providers. This aggregate quality variable measures the extent of:

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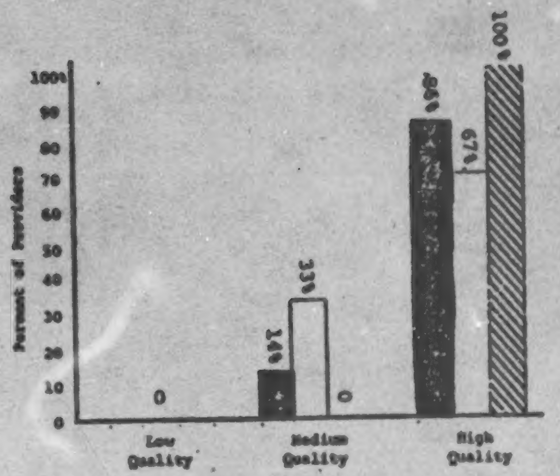
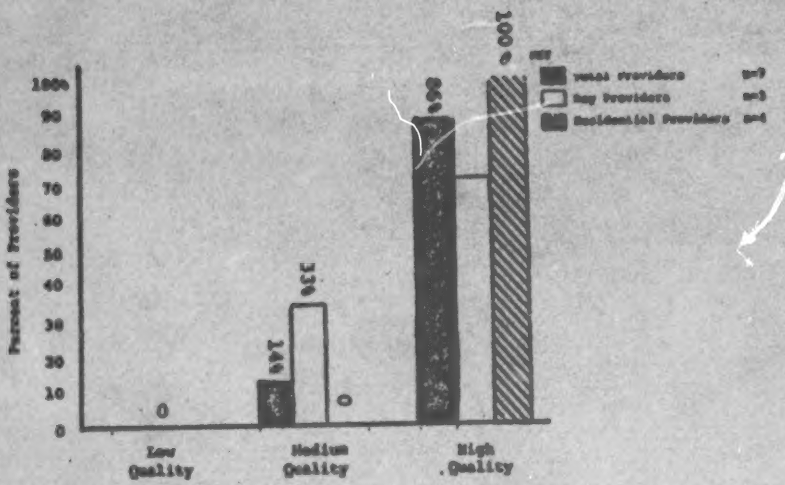
*Note: two factors should be considered in comparisons of quality between day and residential providers:

(1) No attempt was made in this study to assess the comparability of the severely handicapped populations in day versus residential providers; therefore differences in quality may actually reflect differences in the needs and characteristics of the populations served; and

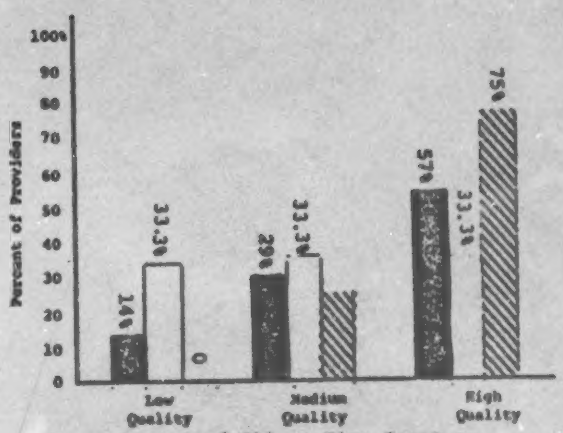
(1) Residential providers are concerned with provision of 24-hour care and are therefore different in scope and purpose from day providers, with a far heavier emphasis on basic care services.



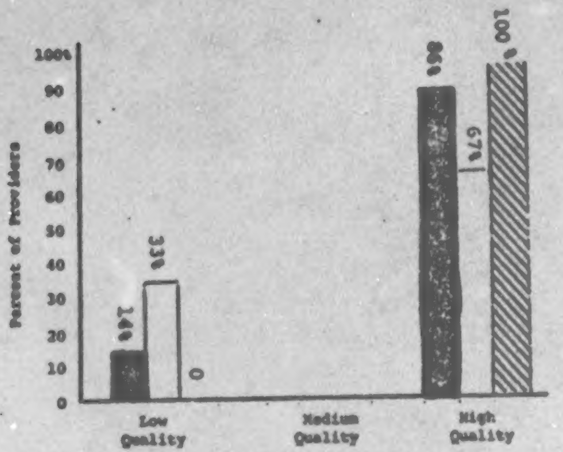
Availability of Educational Materials



Percent of Staff Time Spent on Educational/Habilitative Services



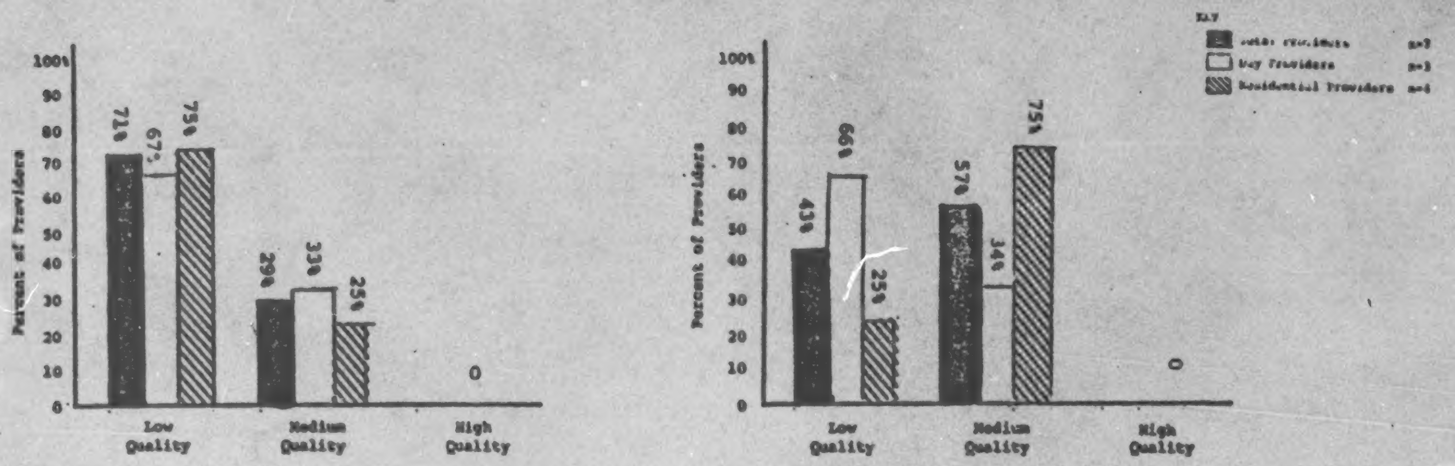
Amount of Client Time Spent on Educational/Habilitative Activities



AGGREGATE
Educational and Habilitative Opportunities

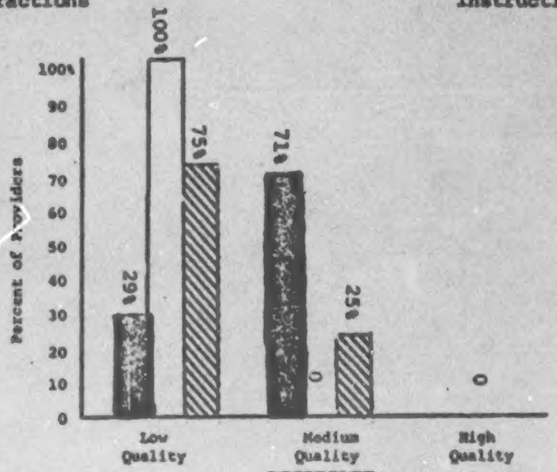
FIGURE DB-3

QUALITY OF EDUCATIONAL AND HABILITATIVE OPPORTUNITIES IN PROVIDERS SERVING DEAF-BLIND CHILDREN AND YOUTH



Warm Staff-Client Interactions

Instructive Staff Behaviors



AGGREGATE
Staff-Client Interactions

FIGURE DB-4

QUALITY OF STAFF-CLIENT INTERACTIONS
IN PROVIDERS SERVING DEAF-BLIND CHILDREN AND YOUTH

(1) Parent involvement in the planning and operations of the provider; and

(2) Parent involvement with the handicapped clients.

Day providers were of higher quality than residential providers in terms of parent involvement with the provider. Residential providers, however, scored higher than day providers on parent involvement with the handicapped clients. Figure EB-5 displays the distribution of day, residential and total providers on the overall quality of parent involvement and on the 2 component variables.

5.4 Quality of Humanization of Institutional Setting

The quality of humanization was medium in all of the providers primarily serving deaf-blind children and youth. The humanization of providers was measured by 5 component variables:

(1) Provider's respect for clients;

(2) Clients' privacy;

(3) Noninstitutionalized environment;

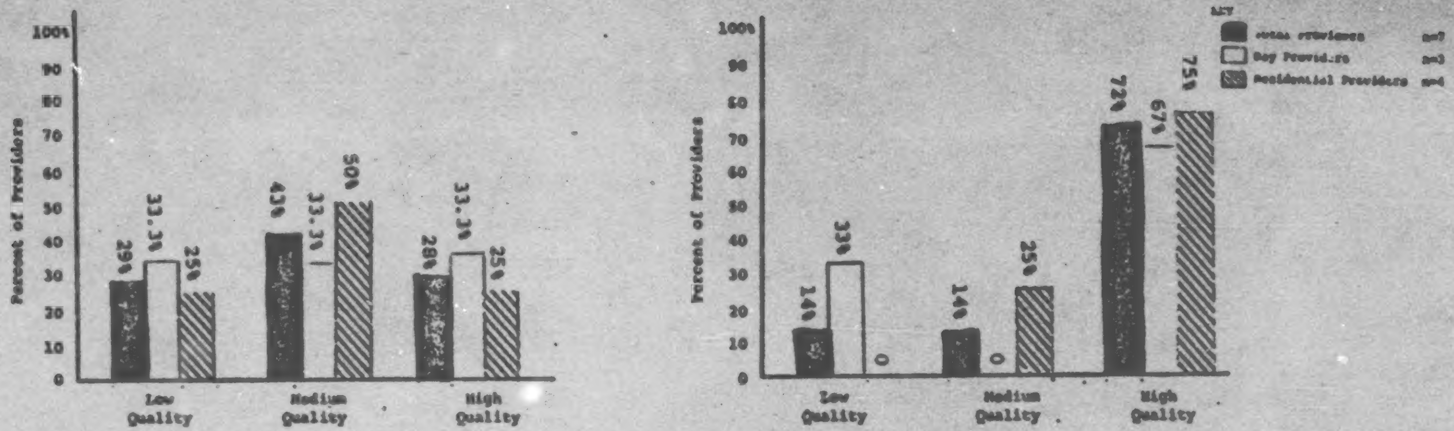
(4) Provider's policies regarding personal possessions of of clients; and

(5) The physical comfort of the provider.

Day providers proved to be of higher quality than residential providers in terms of respect for clients, client privacy, and noninstitutionalized environment. Residential providers, however, scored higher than day providers in the area of physical comfort. In all of the day and residential providers, the quality of the provider's policies regarding clients' personal possessions was judged to be high. Figure DB-6 shows the distribution of day, residential and total providers on the overall quality of humanization and on each of the 5 component variables.

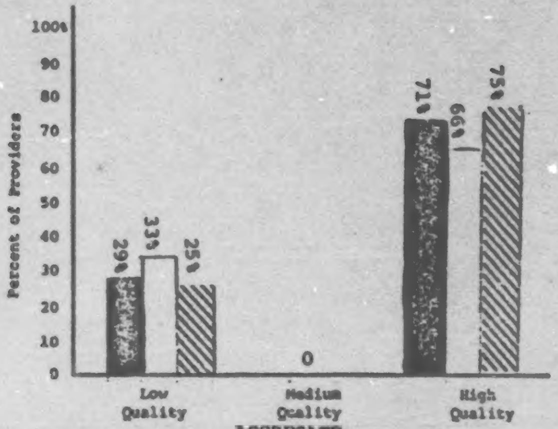
5.5 Quality of Extent of Training and Evaluation

The quality of the extent of training and evaluation was high in 4 of the providers and medium in 3 of the providers primarily serving deaf-blind children and youth. This aggregate quality variable measures the extent to which a provider:



Extent of Parent Involvement with Provider

Extent of Parent Involvement with Child



AGGREGATE

Parent Involvement

FIGURE DB-5

QUALITY OF PARENT INVOLVEMENT
IN PROVIDERS SERVING DEAF-BLIND CHILDREN AND YOUTH

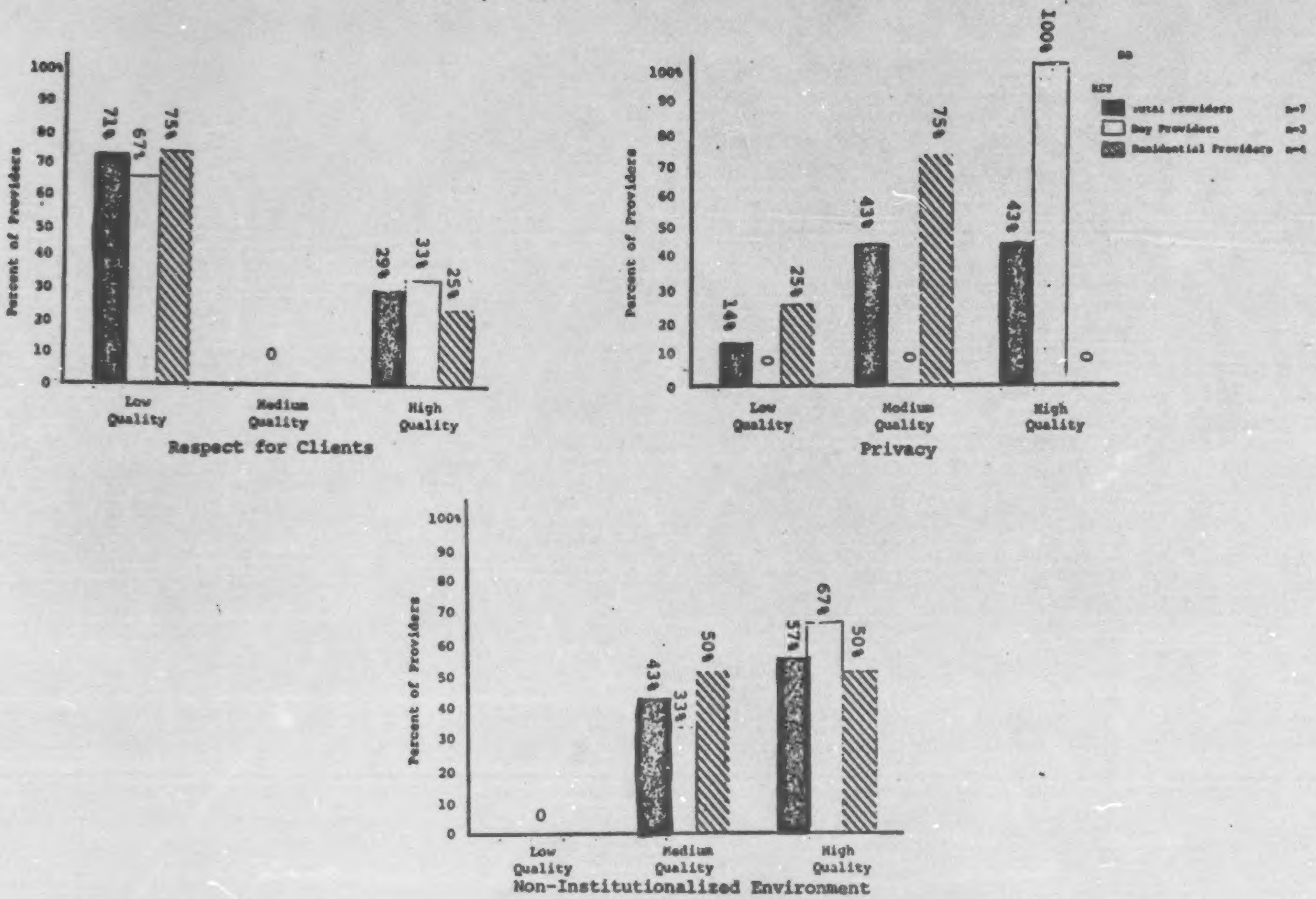
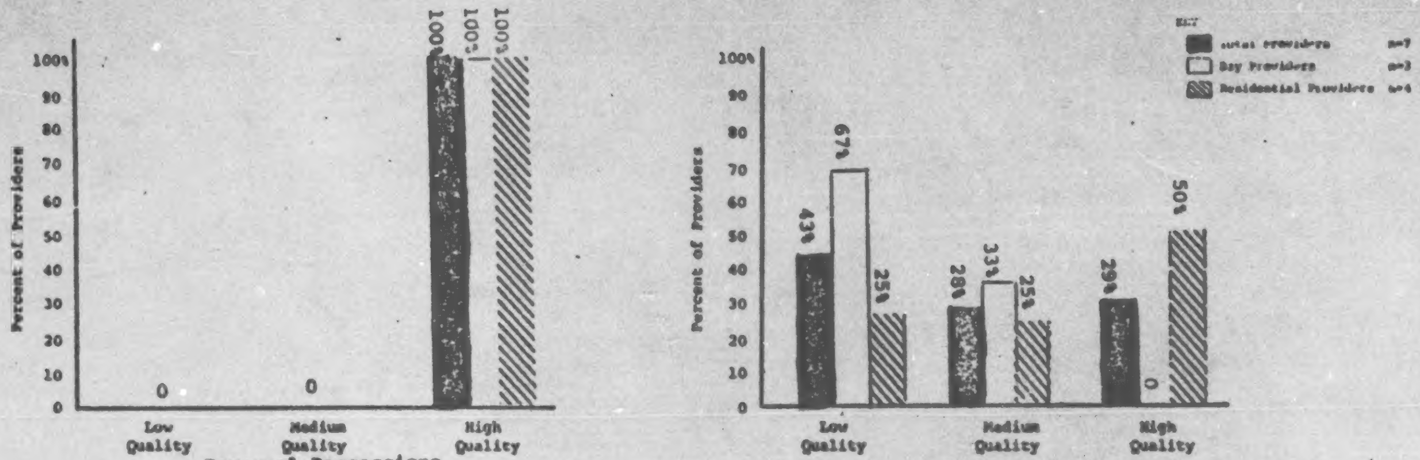


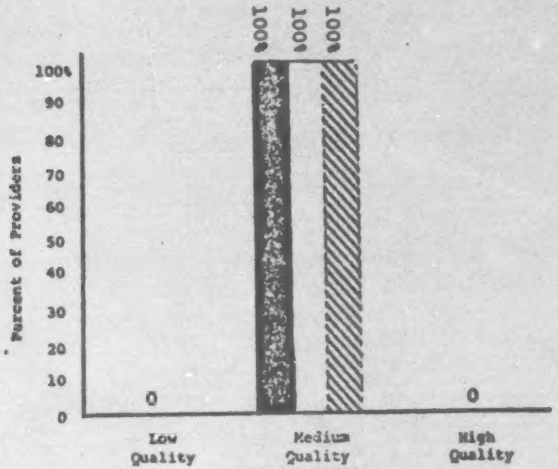
FIGURE DB-6

QUALITY OF HUMANIZATION OF INSTITUTIONAL SETTING
IN PROVIDERS SERVING DEAF-BLIND CHILDREN AND YOUTH



Personal Possessions

Physical Comfort



AGGREGATE
Level of Humanization

FIGURE DB-6 (CONTINUED)

QUALITY OF HUMANIZATION OF INSTITUTIONAL SETTING
IN PROVIDERS SERVING DEAF-BLIND CHILDREN AND YOUTH

(1) Assesses client progress;

(2) Evaluates its educational and habilitative services and/or its overall program of services; and

(3) Offers staff training.

The quality of client assessments was high in all of the day and residential providers. Day providers scored higher than residential providers in terms of program evaluations. Residential providers, however, were of higher quality than day providers on staff training opportunities. Figure DB-7 displays the distribution of day, residential and total providers on the overall quality of extent of training and evaluation and on each of the 3 component variables.

5.6 Quality of Client Movement

Evidence of client movement out of the provider was of medium quality in 2 of the providers and of low quality in 5 of the providers. None of the providers were of high quality on this variable which measures:

(1) The extent to which a provider has released client because the client's level of functioning improved;

(2) The extent to which the provider has released clients to less sheltered settings; and

(3) The extent to which released clients are receiving educational and habilitative services following discharge from the provider.

Day providers scored higher than residential providers on the extent to which clients were released from the provider because the client level of functioning improved. Residential providers proved to be of higher quality than day providers in terms of client movement into less sheltered settings and client's receiving educational and habilitative services after discharge. Figure DB-8 shows the distribution of day, residential and total providers serving primarily deaf-blind clients on the overall quality of evidence of client movement and on each of the 3 component variables.

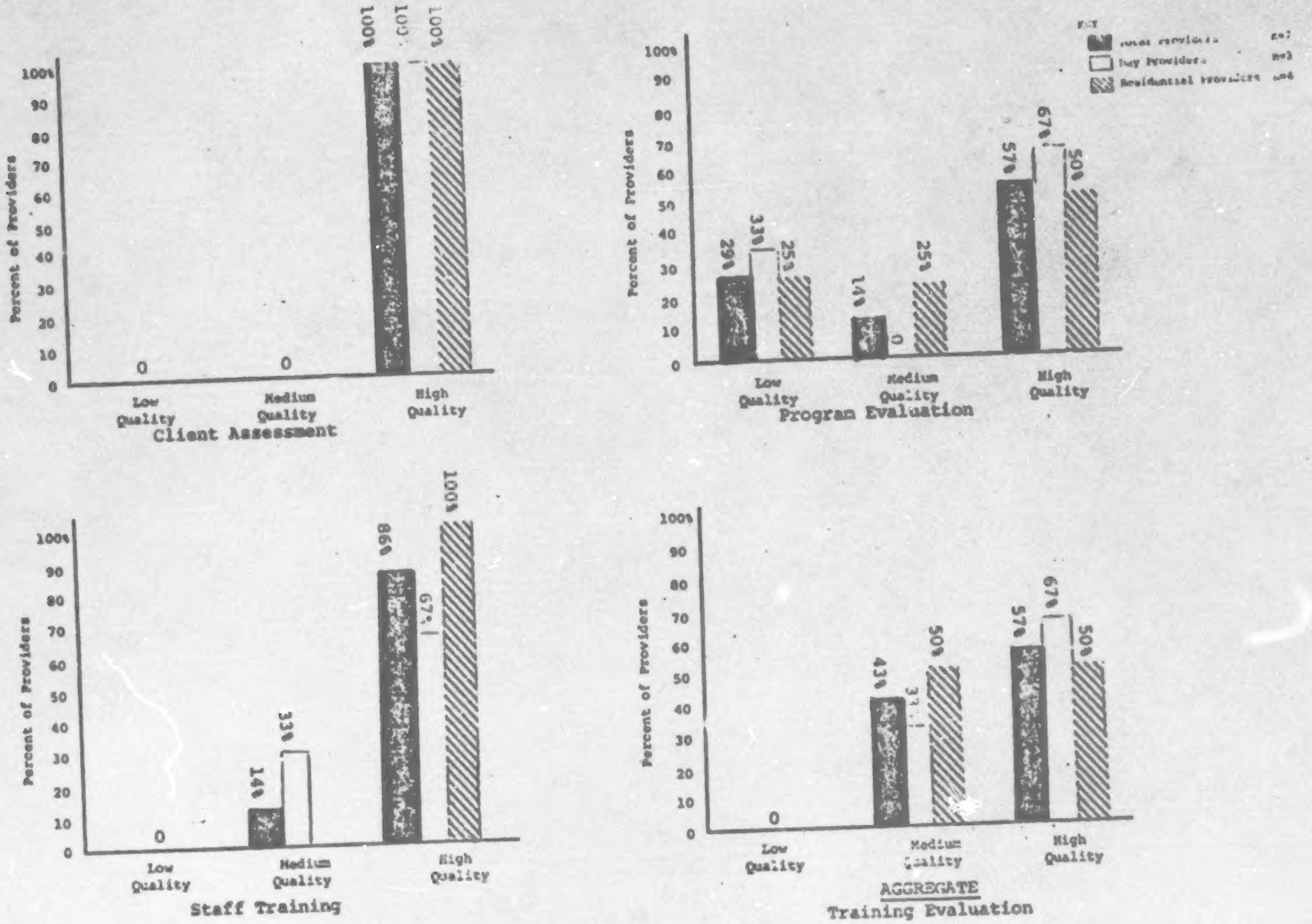
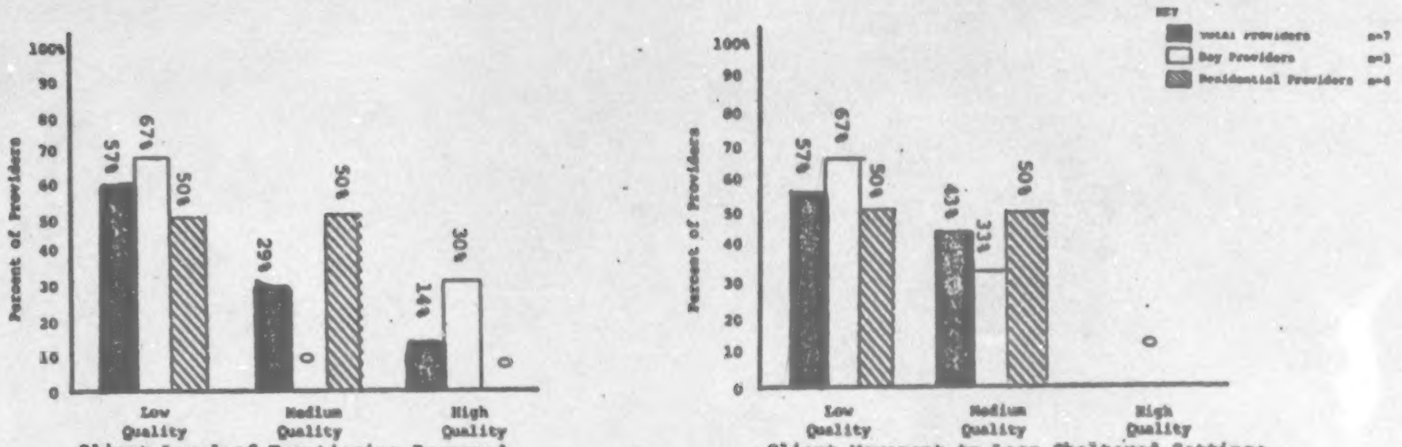


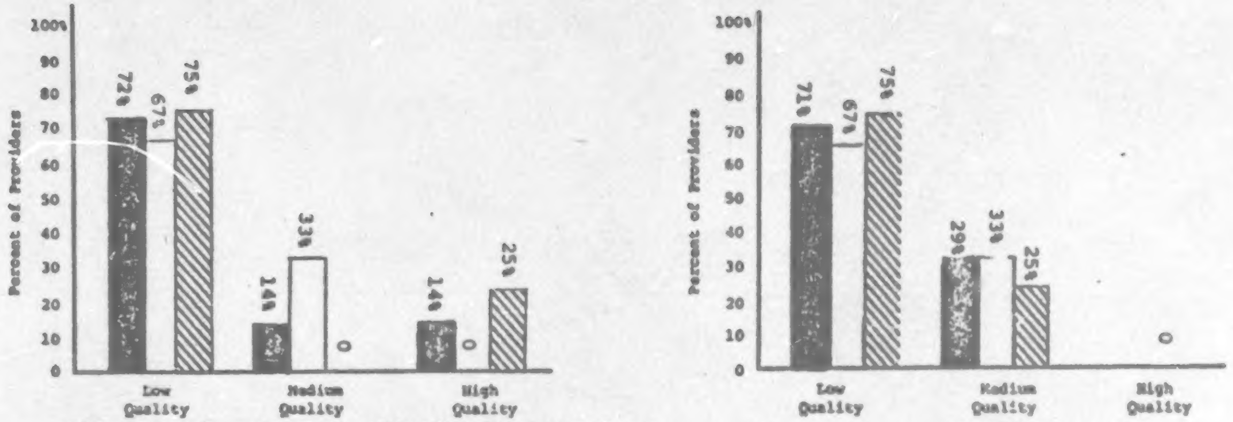
FIGURE DB-7

QUALITY OF EXTENT OF TRAINING AND EVALUATION IN PROVIDERS SERVING DEAF-BLIND CHILDREN AND YOUTH



Client Level of Functioning Improved

Client Movement to Less Sheltered Settings



Client Receives Educational/Habilitative Services After Discharge

AGGREGATE
Evidence of Client Movement

FIGURE DB-8

QUALITY OF EVIDENCE OF CLIENT MOVEMENT

CHAPTER V

A CASE STUDY OF PROVIDERS OF SERVICES TO SEVERELY MULTIPLY-HANDICAPPED CHILDREN AND YOUTH

1.0 SUMMARY

A total of 24 providers out of the 100 included in the study serve severely handicapped children and youth, aged 21 and under, a majority of whom are severely multiply-handicapped. Eleven of these providers are private organizations (10 nonprofit and 1 for-profit) and 12 are public facilities.

More severely handicapped clients are being admitted into these 24 providers than are being discharged. Clients are discharged primarily due to the fact that their level of functioning improved; they are placed in institutional as well as community settings, and over three-quarters of them receive educational or habilitative services.

The vast majority of these providers offer a full range of services to severely multiply-handicapped children and youth, with educational/habilitative services and basic care being the most frequently offered as well as the services consuming the highest percent of staff time. Ninety-seven percent of the severely multiply-handicapped clients, aged 21 and under, receive educational/habilitative services; the average amount of these services received per client per week is 32 hours in residential providers and 26 hours in day providers. A full range of professional and paraprofessional staff provide educational/habilitative services. Behavior modification is the educational technique used most frequently to teach clients self-help and independence skills.

Seventy-one percent of the providers were formally evaluated during the last 5 years. Most providers are regularly evaluated at intervals from 5 times per year to once every 5 years by funding or accrediting agencies as well as by internal staff. Providers perceive their major strengths to be in the areas of high quality staff, individualized teaching programs and parent/community involvement in the providers, and their major weakness to be lack of funds, space and staff time availability. Ninety-five percent of the providers assess severely multiply-handicapped clients' progress in a variety of functional areas. A wide variety of standardized and provider-developed tests are used.

The most frequently employed staff are attendants, support staff, and teachers (certified and noncertified). Most staff are white women. The vast majority of these providers offer some sort of staff training opportunity.

In 23 of the 24 providers serving a majority of severely multiply-handicapped clients there is some form of parent involvement with the provider and with the clients. The most frequent parent activity involves conferences with staff about the child being served. Half of the providers have flexible visiting rules, but less than one-third of the severely multiply-handicapped clients receive monthly family visits; an average of more than one-third of these clients visit home at least once a month.

Most providers have a variety of community ties including activities for their severely handicapped clients, receipt of donated goods and services, and public relations efforts. Volunteers are used in many of the providers in a wide range of direct care capacities.

The most frequently reported changes in provider services and characteristics over the last 5 years have been in the areas of enrollment size, funding level or source, and range of services offered. Providers anticipate that the future will bring an increased demand for, and therefore expansion of, their services as a result of the new right-to-education legislation at the state level.

Most observations of severely multiply-handicapped clients and the staff serving them took place in classroom settings. The condition of these settings was, by and large, excellent. A wide variety of activities were taking place in most of the settings and the average staff:client ratio was approximately 1:4.

The average annual per capita cost in providers serving severely multiply-handicapped clients was $8,309. An average of 77% of this cost is attributable to personnel expenditures. Within personnel expenditures an average of 67% of the costs can be attributed to provision of direct care to clients, which constitutes an average of 50% of the total annual per capita costs. The most important funding source for the 24 providers was the state. Local governments and grants were other major sources of funds.

Providers which serve a majority of severely multiply-handicapped clients, aged 21 and under, were, for the most part, of high quality in terms of educational and habilitative opportunities and parent involvement in the provider; medium quality in terms of humanization of institutional setting and extent of training and evaluation; and low quality on staff-client interactions and evidence of client movement out of provider.

The major differences that emerged between day and residential providers were that, overall, day providers were of higher quality on 9 of the 18 quality variables; residential providers were of higher quality on 7 of the variables; day and residential providers were of equal quality on 2 of the variables. Residential providers cost approximately 2.5 times as much as day providers on a per capita annual basis for total costs. Residential providers spend a little more than twice as much for educational/habilitative services as do day providers and offer clients about 25% more educational/habilitative services per week than day providers.*

2.0 OVERVIEW

A total of 24 providers out of the 100 included in the study serve severely handicapped children and youth, aged 21 and under, a majority of whom are severely multiply-handicapped.** Eleven of these providers are private nonprofit organizations, one is a private profit-making organization, and 12 are public facilities.

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*Note: two factors should be considered in comparisons of quality between day and residential providers:

(1) No attempt was made in this study to assess the comparability of the severely handicapped populations in day versus residential providers; therefore differences in quality may actually reflect differences in the needs and characteristics of the populations served; and

(2) Residential providers are concerned with provision of 24-hour care and are therefore different in scope and emphasis from day providers, with a far heavier emphasis on basic care services.

**Note: when the term "providers" is used throughout this case study, the referent is the 24 providers which serve a majority of multiply-handicapped clients, aged 21 and under.

Ten of the 24 providers serve multiply-handicapped clients aged 21 and under on a day basis only, while 6 providers are strictly residential and 8 provide both types of care for this client group. Two of the 24 providers serve clients in the client's home or foster home as well as at a central facility. Although the 24 providers serve a majority of clients who are primarily severely multiply-handicapped (89%), these providers also serve a very small percentage of mentally retarded, emotionally disturbed, and deaf-blind clients.

The goals of service to severely multiply-handicapped children and youth, aged 21 and under, vary considerably within each provider; however, in all providers the major goal is to develop the individual to her/his highest potential, with the ultimate goal being self-sufficiency.

Providers also attempt to provide a service to parents, family and community members by training them to better understand and work with multiply-handicapped children. In a number of the large institutions which serve severely multiply-handicapped clients, infants as well as older children spend weekends with families in the surrounding community, in hopes that the child will receive the individual attention so necessary for maximum growth and development. Further, the larger providers which serve multiply-handicapped clients report the development of new educational programs, research, and provision of comprehensive training and consultation for parents and community members.

The 24 providers which primarily serve severely multiply-handicapped clients are fairly evenly distributed across the United States. Nine providers are located on the east coast, 7 are in the midwest and 7 are in the western states.

3.0 CHARACTERISTICS OF PROVIDERS

3.1 Client Characteristics

In 87% of the providers serving severely multiply-handicapped clients, there are no mandated age limits for admittance. The average of the youngest group accepted is approximately 2 years, the average age of the oldest clients admitted is 25 years. The age range of severely multiply-handicapped clients presently being served at the 24 facilities is between 0 and 99 years.

The distribution of clients by ethnicity is shown in Table MH-1.

Table MH-1

Ethnic Distribution of Clients

Ethnic origin	Average % of provider population	Range
White	81%	40-97%
Black	12%	0-67%
Spanish surname	4%	0-18%
American Indian	1%	0-17%
Oriental	1%	0-17%
Other	0.4%	0- 8%

In most cases, a little over half the population is male (56% average) with a range from 40% to 83%. The female population accounts for an average of approximately 44% with a range from 17% to 60%.

The estimates of time needed for clients to reach self-sufficiency in toileting, dressing and self-feeding skills varies considerably across providers. Half of the day providers (5) reported that severely multiply-handicapped clients could reach self-sufficiency in approximately 2 years. However, 2 other day providers reported that their clients would need 30 years to reach self sufficiency. Overall day providers estimated that it would take severely multiply-handicapped clients 9 years, 7 months to achieve self-sufficiency. Of the 14 residential providers, the largest majority indicated that it would take an average of 3 years for their severely multiply-handicapped clients to reach self-sufficiency. Four residential providers, however, indicated that these clients would *never* each self-sufficiency.

The average length of stay for clients in *residential* providers is 6 years, 2 months; the average stay for clients in *day* providers is 4 years, 8 months.

3.2 Enrollment

3.2.1 Admission

Many providers which primarily serve severely multiply-handicapped children and youth are mandated to serve clients with handicaps of different levels of severity. More than half of the 24 providers report mandates to serve *severely* handicapped clients (67%), 28% are mandated to serve the *moderately* handicapped and 22% the *mildly* handicapped. Many providers report accepting only those clients who they feel can benefit by the educational and medical services offered at the facility and who are state residents for whom there is no adequate alternative community resource. Many providers indicate that they utilize a quota for fully dependent children and that admission is determined by staff availability to work with new clients. One provider has a "short-term" admission policy: recognizing that parents often need time out from their severely handicapped child, the provider will accept a client for a few months.

The average number of persons applying for admission to these providers from July, 1973 to May, 1974 was 31 with a range from 0 to 115 applicants across the total group. The number of persons accepted into the providers during that time period ranges from 45%-100%, with an average acceptance rate of 83%, or 5% of the severely handicapped children and youth currently enrolled.

Five of the 24 providers currently maintain a waiting list for their services. These providers, which are residential, have an average of 8 persons on the waiting list, and an average waiting period of 19 months. Two residential providers have a minimum and maximum length of enrollment for clients (12 months minimum, 13 years maximum). Only 1 day provider has a minimum length of stay, which is 24 months. Three day providers report a maximum length of stay ranging from 12 to 21 years.

Given their current resources, 42% of the providers feel that they could serve more clients (on the average, 11 more clients); 46% feel that they are currently operating at full capacity; and 13% feel that they should be serving fewer clients.

3.2.2 Discharge

In 13% of the providers, no clients were discharged between July, 1973 and May, 1974. An average of 19 clients were discharged across the rest of providers. Table MH-2 indicates the reasons for which these clients were discharged and the percent of clients who were released during the 1973-74 period.

Table MH-2

Reasons for Client Discharge from Providers

Reasons for discharge	Average % of clients discharged	
	Day n=10	Residential n=17
Client reached maximum age	0%	14%
Functional level improved	27%	28%
Functional level deteriorated	7%	13%
Family removed client	16%	8%
Funding level reduced	5%	1%
Client died	6%	13%
Other	0%	14%

Of the clients who have been discharged, 86% from day providers and 76% from residential providers are currently receiving educational or habilitative services. Unlike the residential providers who seemed to know the current status of all of their discharged clients, day providers were unaware of where 25% of discharged clients are currently receiving educational or habilitative services. Fifty-four percent of clients discharged from residential providers are currently receiving educational/habilitative services at another residential facility, the remainder receive these services in local schools (32%) and specialized day programs (14%). In contrast, severely multiply-handicapped clients who have been discharged from day providers and currently receive educational/habilitative services do so in specialized day programs (36%), residential facilities (20%) and local schools (8%).

3.3 Services Offered to Severely Handicapped Children and Youth*

The overwhelming majority of the 24 providers which primarily serve multiply-handicapped children and youth offer a wide range of services to this client group. Table MH-3 displays the type of service provided, the percent of providers which offer the service and the average percent of staff time spent in providing the service to severely multiply-handicapped clients.

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*Note: for a description of the 7 service components and the 12 staff categories used in the study, see pages 4-7 of the Introduction to this volume.

Table MH-3

Services Offered to Severely Handicappped Clients

Service component	Percent of providers offering the component			Average staff time spent providing the service		
	Total n=24	Day n=10	Residential n=14	Total n=24	Day n=10	Residential n=14
Basic care	88%	80%	93%	31%	19%	41%
Educational/habilitative services	96%	100%	93%	53%	59%	48%
Medical services	58%	70%	50%	4%	4%	3%
Family and community services	88%	100%	79%	4%	6%	2%
Diagnostic and referral services	83%	80%	86%	4%	5%	3%
Administration	79%	90%	71%	6%	5%	7%
Support services	88%	70%	100%	3%	1%	5%

Therefore, as reported in providers serving severely multiply-handicapped clients, staff spend the greatest portion of their time providing educational/habilitative services and basic care services to this client group. In day providers, staff spend 14% more time providing educational and habilitative services, and less than half as much time providing basic care services than do staff in residential providers. It should be remembered, however, that some portion of this variability is accounted for by the fact that residential providers offer 24-hour care, 7 days per week.

Medical services are provided by over 30% more day providers than residential providers; 25% more day facilities provide family services than to residential facilities. Support services are provided by over 30% more residential providers than day providers.

3.3.1 Educational and habilitative services offered to severely handicapped children and youth

Educational and habilitative services are offered to severely multiply-handicapped clients in 96% of the providers. Ninety-seven percent of the severely handicapped population at the providers receive these services. On the average, each of the clients receives 29 hours per week of education or habilitation. These services are delivered by a variety of professionals, as shown in Table MH-4.

Table MH-4

Percent of Educational/Habilitative
Services Delivered by Staff

Staff Category	Percent of educational/ habilitative services delivered		
	Total n=24	Day n=10	Residential n=14
Teacher (certified)	34%	39%	30%
Teacher (noncertified, aide)	25%	36%	16%
Attendant	20%	4%	33%
Nurse	3%	.1%	5%
Therapist	12%	19%	7%
Social worker	0%	.1%	0%
Psychologist	.5%	.5%	.4%
Psychiatrist	0%	0%	0%
Medical doctor	.1%	0%	.2%
Administrator	.1%	0%	.1%
Support staff	0%	0%	0%
Other staff	5%	.4%	8%

Therefore, as reported in providers serving severely multiply-handicapped clients, teachers, aides and attendants are the staff who deliver most of the educational and habilitative services.

One hundred percent of the multiply-handicapped clients receive educational and habilitative services in day providers, while 95% receive those services in residential providers. Residential providers report that each client receives these services 32 hours per week, as opposed to 26 hours per week in day providers.

Teachers and teacher aides account for 75% of the educational/habilitative service delivery in day providers, with therapists delivering most of the remainder (19%). In residential providers, teachers and teacher aides deliver 46% of the educational/habilitative services and attendants deliver 33%, with most of the remainder delivered by therapists, nurses and other staff (e.g., houseparents).

The most common educational/habilitative objective across the 24 providers serving severely multiply-handicapped clients is concerned with developing self-help and independence skills. Instruction in motor skills is offered most frequently by the providers. Table MH-5 displays the types of instruction offered to severely multiply-handicapped clients.

In day providers, pre-academic instruction is offered most frequently, while residential providers most often provide training in motor skills. Offered least often by day providers are prevocational and language training, while residential providers offer music therapy least often.

The educational techniques used by providers to achieve their educational/habilitative objectives are quite varied. As is evident from Table MH-6, behavior modification is used in 17 of the 24 providers to teach severely multiply-handicapped clients a variety of functional skills.

Numerous extracurricular activities are offered to severely multiply-handicapped clients at the 24 providers, including field trips to community areas (15 providers), swimming (13 providers), bowling (8 providers) and physical education (7 providers). Providers also offer outdoor

Table MH-5

Skills Training Offered to Severely Handicapped Clients

Instructional area	Number of providers offering skill training
Motor skills	13
Self-help skills	11
Pre-academic skills	11
Academic skills	10
Recreation skills	9
Language training	9
Sensory awareness	9
Speech therapy	9
Physical therapy	8
Occupational therapy	7
Music therapy	6
Prevocational skills	6

Table MH-6

Educational/Habilitative Techniques Used by Providers

Educational/habilitative technique	Number of providers using technique
Behavior modification	17
Individual instruction	8
Adaptive materials & equipment	7
Audiovisual aids	5
Individual programming	5
Precision teaching	5
Modelling	4

activities (6 providers), boy and girl scouts (6 providers) and religious activities such as chapel and Sunday school (6 providers).

3.3.2 Staff perceptions of resources available to clients

3.3.2.1 Materials. The overwhelming majority of the 24 providers serving multiply-handicapped clients provide a wide range of materials to that client group. Across all providers, materials most frequently available to all severely handicapped clients are toys and and building materials. Toys are available in most sufficient quantity, while books and magazines are most accessible (i.e., available at all times) to clients. Across all providers animals are least frequently available. Books and magazines are available in least sufficient quantities, while toys are least accessible to clients.

3.3.2.2 Possessions. The majority (93%) of the 14 residential providers serving severely multiply-handicapped clients report that these clients have their own clothing which is always returned to them following laundering. Members of this client group also possess other personal articles (such as radios, stuffed animals, toys, etc.) in 95% of the residential providers sampled. Eighty-one percent of the residential providers report that severely multiply-handicapped clients have private storage areas available to them for storing personal articles.

3.3.2.3 Work opportunities for clients. Almost half of the 24 providers serving multiply-handicapped clients offer these clients the opportunity to earn money or credits. One provider reports that these clients earn from $1 to $5 per week, and 3 report clients earning less than $1 per week. Clients earn credits in 4 providers.

Severely multiply-handicapped clients acquire money and credits by performing a number of tasks as shown in Table MH-7. Money and/or credits are earned primarily for good behavior, academic skills, sheltered workshop tasks and housekeeping tasks. Clients in day providers earn money or credits for performing only 3 tasks, while clients in residential providers earn money or credits by performing a wider variety of tasks.

Table MH-7

Work Performed by Severely Handicapped Clients for Money or Credits

Type of work performed by client	No. of providers where money is earned		No. of providers where credits are earned	
	Day n=10	Residential n=14	Day n=10	Residential n=14
Sheltered workshop	2	1	-	1
Janitorial	-	1	-	1
Care of other clients	-	2	-	1
Food service	-	2	-	-
Laundry	-	1	-	1
Housekeeping	-	3	-	1
Clerical	-	2	-	1
Good behavior	1	2	-	1
Academic skills	1	-	1	2

3.4 Evaluation

3.4.1 Evaluation of provider services

Formal evaluations of service components are conducted in 71% of the providers serving severely multiply-handicapped children and youth. Formal evaluations of provider services are not made in 40% of the day providers of this group and in 7% of the residential providers. The components most often evaluated in day providers are educational/habilitative services and administration and staff support; least evaluated components are medical and diagnosis/referral services. Among residential providers, the educational/habilitative, basic care and medical service components are most often evaluated, and family and diagnosis and referral services are least often evaluated. In some cases evaluations of these providers were made as one-shot studies, but in most providers there are regular evaluations at intervals from 5 times a year to once every 5 years. Evaluations are conducted by representatives of a variety of federal, state and local funding/accrediting agencies as well as by private organizations (e.g., United Way, Educational Testing Service). In a few providers there are also ongoing evaluations by internal staff. Evaluation results are most frequently used for funding and/or accreditation; often they are used in program development.

The educational/habilitative service component was evaluated within the past 5 years in 18 of the 24 providers serving severely multiply-handicapped clients. Findings indicate that the educational/habilitative services provided are generally adequate to outstanding in meeting client needs and developing their potential. Specific weaknesses noted include needs for more space, more staff, better client evaluation and more publicity.

High-quality staff, individualized programs and parent/community involvement are the factors most frequently mentioned by directors of this group of providers as major strengths. Open communications and organizational flexibility are considered important strengths as is the ability to identify and serve clients at an early age. Lack of money, space and staff time availability are the major weaknesses most often mentioned by these directors. Where parent involvement is low, it is seen as a major weakness, and inadequate outreach and follow-up efforts are cited as inadequacies due mainly to lack of staff time availability. Physical isolation and inadequate transportation services are sometimes mentioned as problems. Efforts to overcome weaknesses are being made in almost all of the providers serving multiply-handicapped clients. Some of the forms these efforts take are: work with state and federal groups, efforts to find new funding sources, establishment of sheltered workshops, and organization of parent/staff meetings.

3.4.2 Client assessment

Severely multiply-handicapped children and youth are assessed for progress in 95% of the providers which primarily serve this population. The areas of client assessment and the ranges and mean percentages of clients assessed across sites are displayed in Table MH-8.

Table MH-8

Client Assessment

Assessment area	Mean % of clients assessed	Range of clients assessed
Self-sufficiency	97%	33%-100%
Communication	87%	0%-100%
Social and/or emotional competence	84%	0%-100%
Intelligence	83%	0%-100%
Academic skills	80%	10%-100%
Other (motor development, sensory awareness, medical)	82%	0%-100%

Average percentages of clients assessed are generally higher in day providers of this group than in residential providers, with the most notable difference in the area of academic skills, where 96% of the day clients are assessed as opposed to 65% of the residential clients.

In 61% of these providers the same assessment procedures are used for all clients, and in 39% the procedures vary according to client needs. Assessment procedures usually include standardized tests (e.g., Stanford Binet, Cattell Infant Intelligence, Wechsler Intelligence Scale for Children [WISC], Leiter International Performance Scale, Denver Developmental, Peabody Picture Vocabulary), but in more than half the providers for multiply-handicapped clients provider-developed observation procedures and tests are used exclusively or in combination with standardized procedures.

Assessment results are used in 90% of these providers in developing instructional programs for clients and in 71% to measure client progress. In 38% of providers results are used to assign clients to groups within providers and to assign placement on leaving, and/or to evaluate program components. Among day providers, especially, results are used in parent consultation and counseling as well.

3.5 Provider Staff Characteristics

Table MH-9 displays the average per capita number of full time equivalent staff (based on a 40-hour work week) who work with severely handicapped children and youth in the 24 providers serving a majority of severely multiply-handicapped clients. Staff:client ratios in day providers all fall below the 1:10 level; the highest ratios are in the categories of teachers and aides, each showing a 1:14 staff:client ratio. Highest ratios in residential providers of this group are in the categories of attendant (1:3) and support staff (1:5).

Table MH-9

Average Full-Time Equivalent Staff per Client

Staff category	Average full-time equivalent staff per client		
	Total n=24	Day n=10	Residential n=14
Teacher (certified)	.12	.07	.15
Teacher (noncertified, aide)	.08	.07	.09
Attendant	.21	.005	.35
Nurse	.08	.008	.13
Therapist	.04	.05	.04
Social worker	.007	.004	.01
Psychologist	.001	-0-	-0-
Psychiatrist	-0-	-0-	-0-
Medical doctor	.003	.001	.005
Administrator	.11	.06	.14
Support staff	.17	.03	.26

The total number of overtime hours worked in each provider ranges from 0 to 68, with an average of 11 hours per week. Teachers work the most overtime hours in 42% of the providers, administrators in 21%.

Women staff members average 89% across providers serving primarily multiply-handicapped clients; 33% of the providers have only women staff members. Percent of nonwhite staff among these providers ranges from 0 to 100%, with an average of 21%.

Ninety-six percent of this group of providers offer in-service training opportunities (conferences, workshops, seminars) for their staff. Pre-service training/orientation is offered in 52% of these providers, and 17% pay for staff course work. Providers most often offer these training opportunities to teachers and other direct care staff in an attempt to increase their technical knowledge and their effectiveness in working with clients.

3.6 Parent Participation and Community Involvement in the Providers

3.6.1 Parent participation.

Parents participate in various aspects of the provider in 23 of the 24 facilities serving primarily severely multiply-handicapped children and youth. An average of 83% of the parents across providers participate in discussions with staff about their child, and 45% participate in parent education sessions. According to staff estimates, an average of 45% of the parents across providers participate in the planning and delivery of services to their child. Most of the staff interviewed estimate that parent involvement has a high impact on the child's progress.

Figure MH-1 displays the types of parent involvement and the percent of parent participation in day and residential providers serving severely multiply-handicapped children and youth.

In 57% of the residential providers, parents can visit their child at any time. In the remaining 43%, parents must visit during established visiting hours. An average of 36% of the clients in these providers never receive visits from family members, 33% receive visits

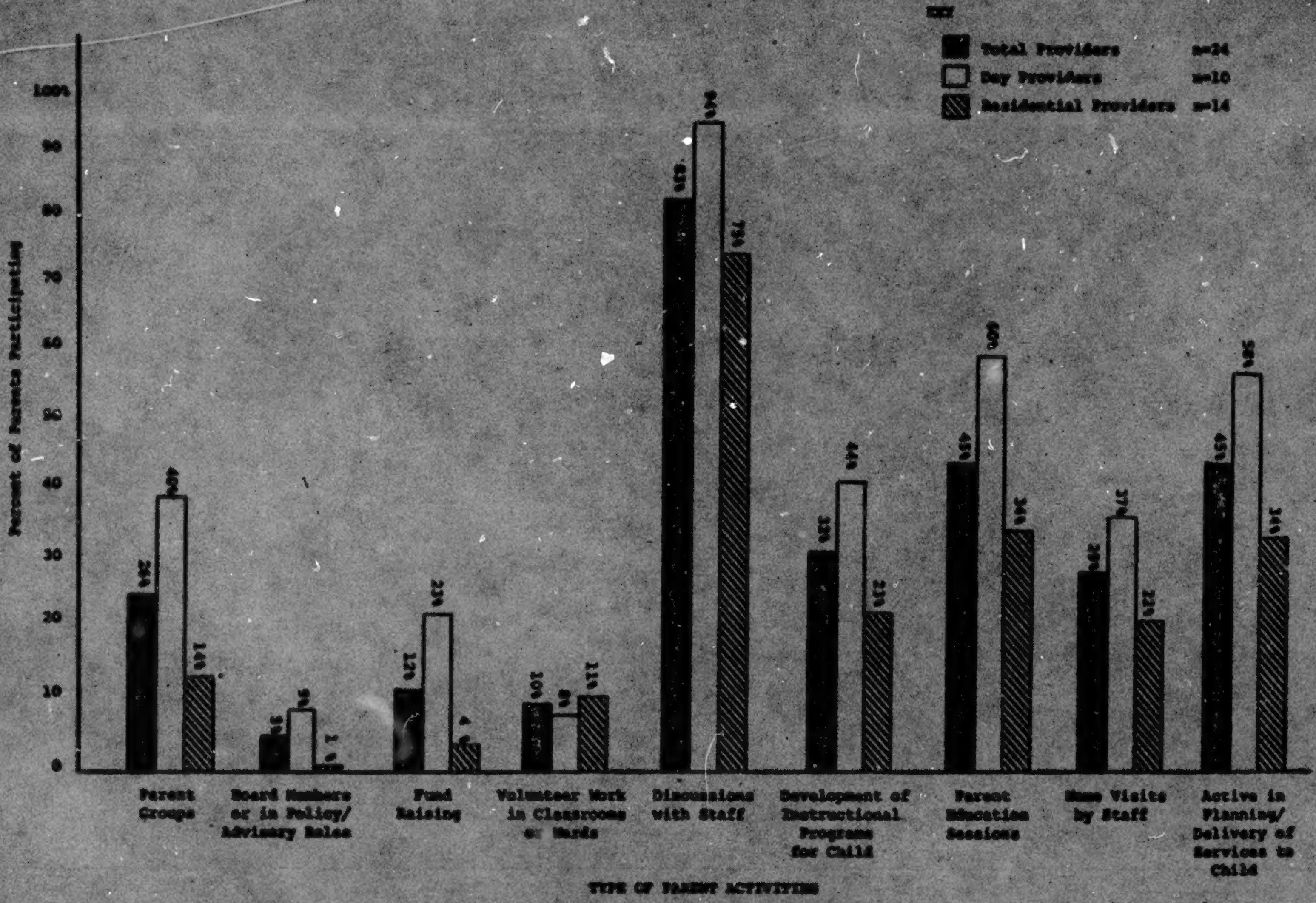

FIGURE MH-1

EXTENT OF PARENT INVOLVEMENT
IN PROVIDERS SERVING SEVERELY MULTIPLY-HANDICAPPED CHILDREN AND YOUTH

less than once a month, and 31% receive visits from family at least once a month.

There is no public transportation to and from the facility in 43% of the providers; in 21% of the providers, public transportation is available less than once an hour, and in the remaining 36%, transportation to and from the provider is available at least once an hour. Parents use private cars as the major means of transportation in all of the residential providers.

An average of 38% of the severely handicapped clients at these providers are taken home for visits at least once a month; 27% are taken home less than once a month, and 35% of the clients never go home for visits. Two providers offer incentives to parents to take their child home for visits: 1 provider loans equipment free of charge to the family during home visits; the other provider conducts behavior modification training sessions for parents prior to the home visit.

3.6.2 Community involvement

Providers offer various opportunities for severely handicapped clients to interact with nonhandicapped peers. Twelve of the 24 providers conduct field trips for severely handicapped clients to community facilities such as libraries, theaters, and shopping centers and to events such as concerts and sports activities. In 6 providers, some severely handicapped clients are integrated into regular classrooms with nonhandicapped peers for portions of the day. Clients attend church and religious programs in the communities surrounding some of the providers. In 2 providers, clients use the recreational facilities of the community such as the YMCA and local summer day camp.

All of the providers serving primarily multiply-handicapped children and youth receive some goods and services donated by the community. Goods most frequently donated include: special diagnostic and therapeutic equipment such as eyeglasses, hearing aids and wheelchairs; sports equipment and recreational facilities such as parks, bowling alleys, swimming pools; musical and audiovisual equipment; transportation vehicles;

and cash contributions. Other goods offered are furniture, clothing, books, food, tickets to special community events, and a portable classroom. The most frequent services donated include transportation and professional services such as screening and evaluation, counseling, medical and psychological consultation, speech therapy and training. In addition, fund raising, construction, maintenance and repair services have been donated in some providers.

Providers have used various methods to attract greater community involvement in their programs. Speaking engagements, radio and television coverage, tours of the provider facilities, publication of brochures, newspaper articles, and newsletters (including individual newsletters to parents, grandparents, and siblings in one provider) are the techniques most frequently cited by providers. Other methods include the use of films and slides describing the provider, coordination with local community funding agencies, training seminars, teaching demonstrations to local groups, and internship programs with universities.

All of the providers have volunteers who work regularly at the facility. The average number of regular volunteers per capita is 8, ranging from .02 to 10.4 across providers. A mean total of 3 hours per client per week are worked by these volunteers, with a range from .06 to 20.8 hours per week.

The types of activities in which volunteers most frequently assist include: educational instruction (serving as a teacher's aide, working on a one-to-one tutorial basis, teaching basic skills, language development); recreation (supervising sports activities, field trips, parties, scout troops); basic care (dressing, feeding, toileting, bathing); and therapy (occupational, physical, and speech). Other volunteer activities which occur less frequently in the providers are transportation of clients to activities and supervision of religious programs.

3.7 Changes in Provider Services

According to the directors of the providers serving primarily multiply-handicapped clients, significant change has taken place in two-thirds or more of these providers in the areas of enrollment size (increases in most day providers, decreases in most residential providers), funding level/source (increases in most cases, with more local, state and federal government support), range of services offered (expansion in all providers indicating change), number of staff (up in 16 providers, down in 3), and educational approaches/materials (upgrading, curriculum development, use of behavior modification techniques). Two-thirds or more of the directors report stability in length of client enrollment and in discharge criteria.

Residential providers have experienced more change during the past 5 years than day providers have in 7 areas: enrollment capacity (up in 5 residential providers, down in 3), length of enrollment (shorter), discharge criteria (greater tendency to release clients if alternatives are available), severity of handicap served (more severe), policy control and management (better organized), philosophical orientation (emphasis shifting from custodial to habilitative, from institutional to normalizing), and educational approach (86% of the residential providers reported educational upgrading, as opposed to 50% of the day providers). Client living arrangements have changed in 50% of the residential providers in this group, but with no discernible pattern. Seventy percent of the day providers (as opposed to 36% of the residential providers) reported change over the last 5 years in the age range of clients served, with a greater number of younger clients and expanded age limits.

All of the directors of these providers feel that recent state and federal legislation will affect their programs. Universal right to education laws were most often mentioned as change agents. State government reorganization and changes in funding policy were cited as having an effect on providers, as were changes in licensing requirements and new laws centered on clients' civil rights. Generally expected effects of recent legislation are that providers will serve clients with a wider range of handicaps and more *severe* handicaps and that services offered will change to come into accordance with licensing/funding requirements.

Other future changes anticipated include expanded facilities, greater enrollment, and more services offered. Sheltered workshops, vocational training centers, group homes and outpatient programs are possible service additions; development of research components and establishment of a multiple handicap resource center were also mentioned as possibilities. More client interaction with the outside community is expected, as well as earlier referral to and discharge from providers, with a shortened average length of enrollment. According to their directors, 58% of the providers serving primarily severely multiply-handicapped clients would need additional facilities if enrollment were to increase by 25%.

4.0 OBSERVATIONS OF SEVERELY HANDICAPPED CHILDREN AND YOUTH AND THE STAFF SERVING THEM*

4.1 Description of Settings Observed

A total of 865 time-sampled observations were taken in various settings of the 24 providers which primarily serve severely multiply-handicapped children and youth. Observations were conducted in those settings within each provider where severely handicapped clients spend a typical day. The most frequently observed settings were classrooms (57.9% of the observations) and wards (11% of the observations). The interiors of the buildings were in excellent condition in 86% of the observations, moderate condition in 13% and poor condition in only 1% of the observations. Antiseptic or noxious odors were observed in 9% of the observations.

In half of the observations of providers with sleeping accommodations, the sleeping areas for severely handicapped clients were not private. In 14% of these observations the sleeping areas were very private and in 36% the areas were somewhat private. Toileting facilities tended to be more private than sleeping areas. There was a low level of institutionalization (homelike as opposed to a sterile environment) in

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*Note: for a description of observation procedures used in the study and operational definitions of items on the Observation Schedule, see pages 8-10 of the Introduction to this volume.

37% of the observations, a moderate level in 49% and high level in 14% of the observations.

Day and residential providers serving multiply-handicapped children differed in several respects. A noxious odor was observed in 1% of the observations of day providers and 9% of the observations of residential providers. Very private toileting areas were 1.5 times more frequent in day providers than in residential providers. A high level of institutionalization (sterile as opposed to a homelike environment) was 7 times as frequent in observations of residential, as opposed to day, providers.

4.2 Description of Activities Observed

A variety of activities were observed in the various settings of the 24 providers which primarily serve severely multiply-handicapped clients. Table MH-10 displays the types of activities and the corresponding percent of observations in which these activities occurred.

Table MH-10

Types of Activities Observed

Type of activity	Frequency of occurrence (Percent of total observations)
Educational	36%
Recreational	12%
Mealtime, snacktime	14%
Free play	10%
Naptime	2%
Vocational	2%
Self-care	4%
Therapy	6%
Basic care	1%

In 13% of the observations, no organized activities were observed. The activity level was high in 21% of the observations, moderate in 47% and low in 32% of the observations. Behavior modification took place in 20% of the observations.

An adequate number of play and learning materials were available in 75% of the observations. The condition of the materials was high and the quality was excellent in 73% of the observations of settings with materials available to clients.

In 78% of the observations, male and female clients were grouped together in the various settings. Clients were grouped homogeneously with other clients of similar levels of disability in 63% of the observations.* Clients were adequately clothed in 92% of the observations, inappropriately clothed in 4%, partially or completely nude in 2%, and in ill-fitting or unclean clothes in 2% of the observations.

The average number of clients in a setting was 8, with a range from 1 to 75. The average number of staff was 2, with a range of 0 to 25. No staff were present in the setting in 3% of the observations. The average staff:client ratio was 1:4, with a range of from 5:1 to 1:26.

There were many differences in the activities and materials in day versus residential providers serving severely multiply-handicapped children. Educational, recreational and therapy activities were more frequently observed in *day* than in residential providers. Vocational activities, free play, self-care and basic care activities were more frequently observed in *residential* providers. No organized activities occurred in 1% of the observations of day providers and in 20% of the observations of residential providers. Behavior modification was observed twice as frequently in *day* providers as in residential providers.

Play and learning materials were more available, in better condition, and of higher quality in day providers than in residential providers.

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*Note: in 13% of the observations, the observer noted that none of the clients in the setting appeared to be severely handicapped according to the definition used in this study.

An absence of play materials was 6 times more frequently observed in residential providers as in day providers. In 99% of the observations of of day providers and 88% of the observations of residential providers, clients were adequately clothed. In all of the day settings observed, there was at least one staff member present; in 4% of the observations of residential providers, there were no staff members present in the settings.

4.3 Description of Clients and Staff Observed

Systematic observations of 291 settings within 24 providers of services to multiply-handicapped clients indicated that there were 7 distinct types of behaviors taking place between clients (peer to peer) and between clients and staff including:

(1) "Inner-directed" behaviors on the part of the clients -- clients acted without observable external cause or interaction with their environments;

(2) Brief staff-client interactions;

(3) Sustained staff-client interactions;

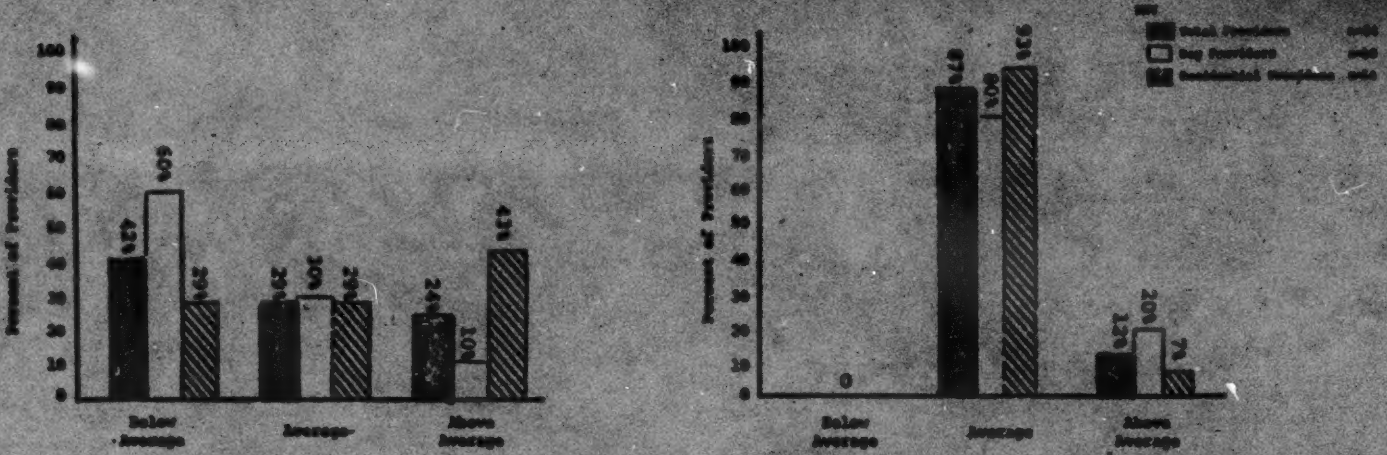
(4) Interactions between clients and staff during instructional activities;

(5) Interactions between clients (peer to peer) and clients and staff during play activities;

(6) Peer to peer interactions;

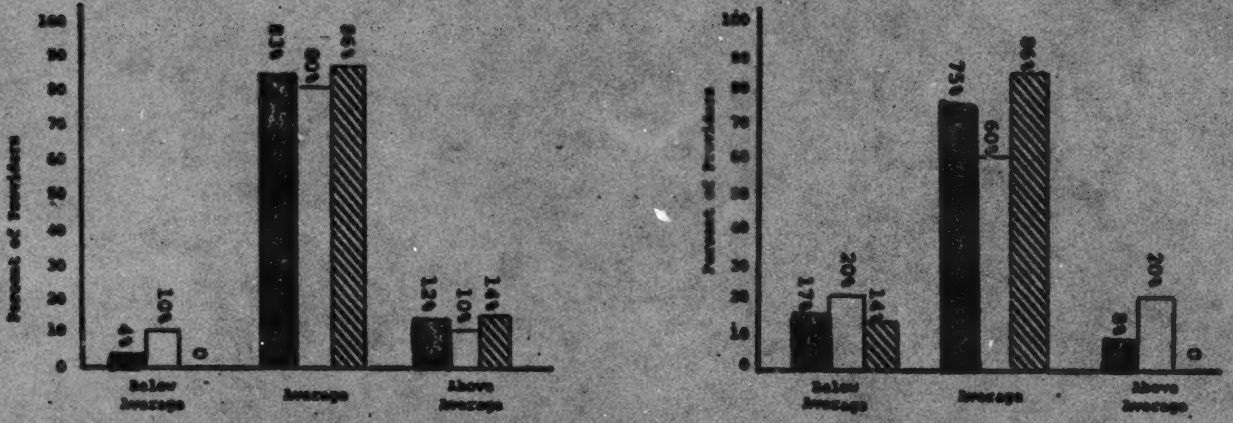
(7) Negative affect on the part of clients -- aggressive behavior.

Figure MH-2 depicts the prevalence of each of the 7 behavior types in day, residential and total providers serving multiply handicapped clients compared with the average for all providers in the study. This figure indicates that there were notable differences in the amounts of observed behaviors in the day, as opposed to the residential, providers. Sixty per cent of the day providers showed considerably below average amounts of "inner-directed" behaviors, compared to 43% of the residential providers who indicated extremely high amounts of this type of behavior. More day providers than residential providers showed above average amounts of brief staff-client interactions. The residential providers, however, indicated more above average levels of sustained staff-client interactions.



"Inner-Directed" Behaviors

Brief Staff-Client Interactions

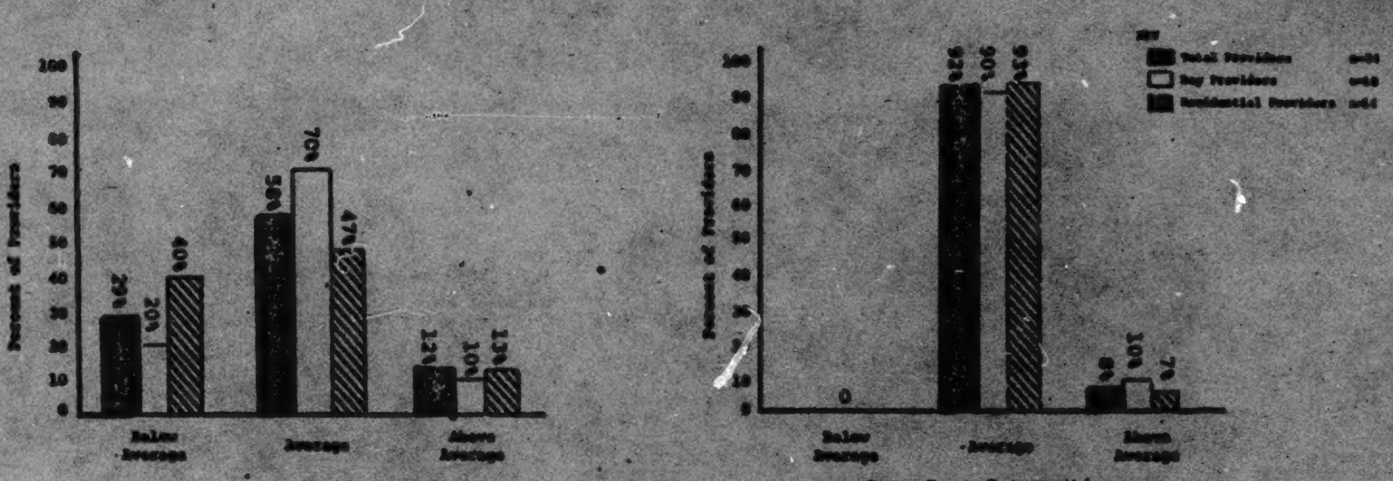


Sustained Staff-Client Interactions

Staff-Client Interactions During Instructions

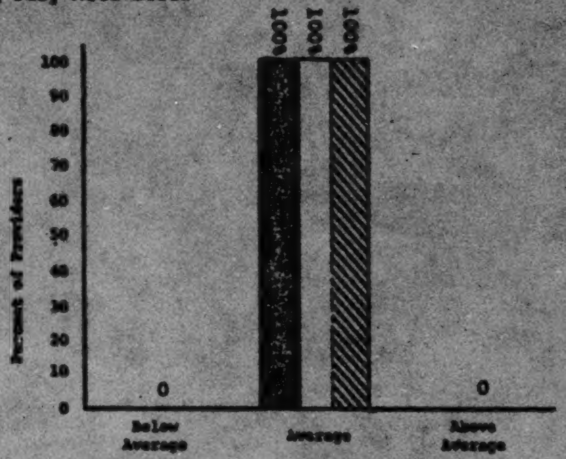
FIGURE III-2

PREVALENCE OF SEVEN BEHAVIOR TYPES
IN PROVIDERS SERVING SEVERELY MULTIPLY-HANDICAPPED CHILDREN AND YOUTH



Interactions During Play Activities

Peer-Peer Interactions



Negative Affect--Aggressive Behavior

FIGURE MH-2 (CONTINUED)

PREVALENCE OF SEVEN BEHAVIOR TYPES
IN PROVIDERS SERVING SEVERELY MULTIPLY-HANDICAPPED CHILDREN AND YOUTH

When staff-client interactions during instructional activities were observed, the day providers indicated slightly more of this type of behavior, with 20% in the above average category. There was considerable variability among the providers on interactions during play activities; 20% more of the day providers, however, showed below average amounts of this type of behavior, compared to 40% of the residential providers. Peer to peer interactions were also slightly more frequent in the day providers, as opposed to the residential providers.

5.0 QUALITY OF PROVIDERS OF SERVICES TO SEVERELY HANDICAPPED CHILDREN AND YOUTH*

5.1 Quality of Educational and Habilitative Opportunities

The quality of educational and habilitative opportunities was high in 75% of the providers serving a majority of multiply-handicapped children and youth, medium in 21% and low in 4% of these providers. This quality variable is based on 3 component variables:

(1) The range of educational and habilitative materials available to clients;

(2) The percent of staff time spent on educational and habilitative services; and

(3) The amount of client time spent in educational and habilitative activities.

Day providers scored higher than residential providers on the range of educational and habilitative materials available. Residential providers, however, were of higher quality than day providers in terms of the percent of staff time spent on educational and habilitative services and on the amount of client time spent on educational and habilitative activities.*

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*Note: for a description of the quality model constructed for this study, see pages 10-17 of the Introduction to this volume.

Figure MH-3 displays the distribution of day, residential and total providers on the overall quality of educational and habilitative opportunities and on the 3 component variables.

5.2 Quality of Staff-Client Interactions

The quality of staff-client interaction was medium in 21% of the providers and low in 79% of the providers. None of the providers were of high quality on this variable which combines the component variables of:

(1) Warm staff-client interactions; and
(2) Instructive staff behaviors toward clients.

Day and residential providers scored approximately equal on warm staff-client interactions. The instructive behaviors of staff were of higher quality in the day providers than in the residential providers.

Figure MH-4 displays how day, residential and total providers are distributed on the 2 component variables and on the overall quality of staff-client interactions.

5.3 Quality of Parent Involvement

The quality of parent involvement was high in 67% of the providers, medium in 29%, and low in 4% of the providers serving a majority of multiply-handicapped children and youth. This aggregate quality variable measures the extent of:

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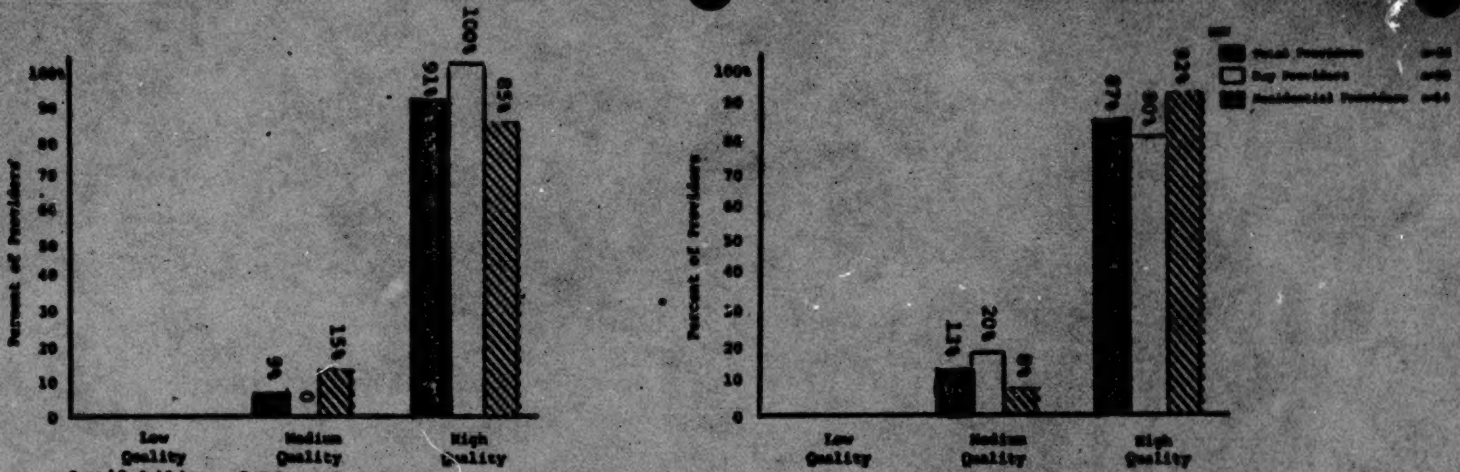
*Note: two factors should be considered in comparisons of quality between day and residential providers:

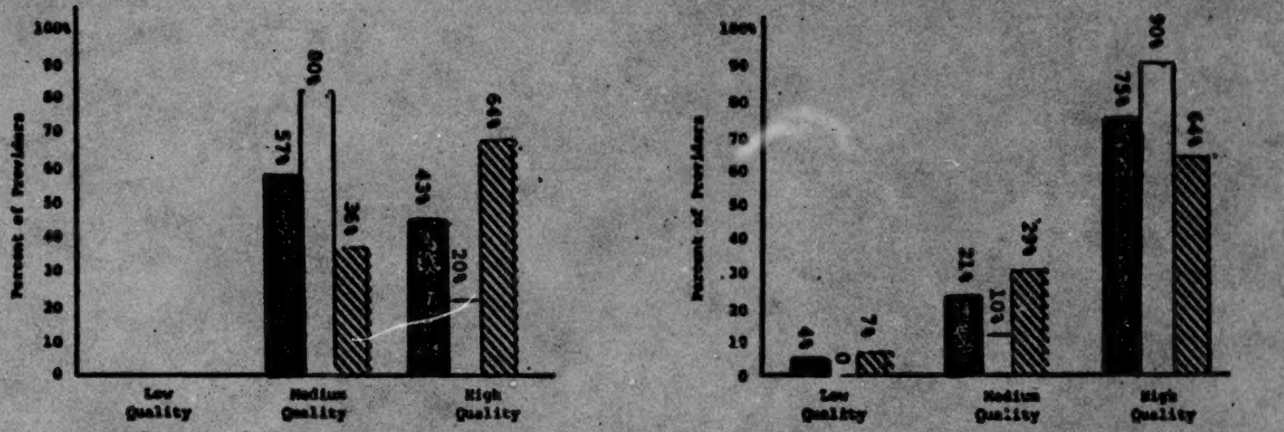
(1) No attempt was made in this study to assess the comparability of the severely handicapped populations in day versus residential providers; therefore differences in quality may actually reflect differences in the needs and characteristics of the populations served; and

(2) Residential providers are concerned with provision of 24-hour care and are therefore different in scope and purpose from day providers, with a far heavier emphasis on basic care services.



Availability of Educational Materials

Percent of Staff Time Spent on Educational/Habilitative Activities

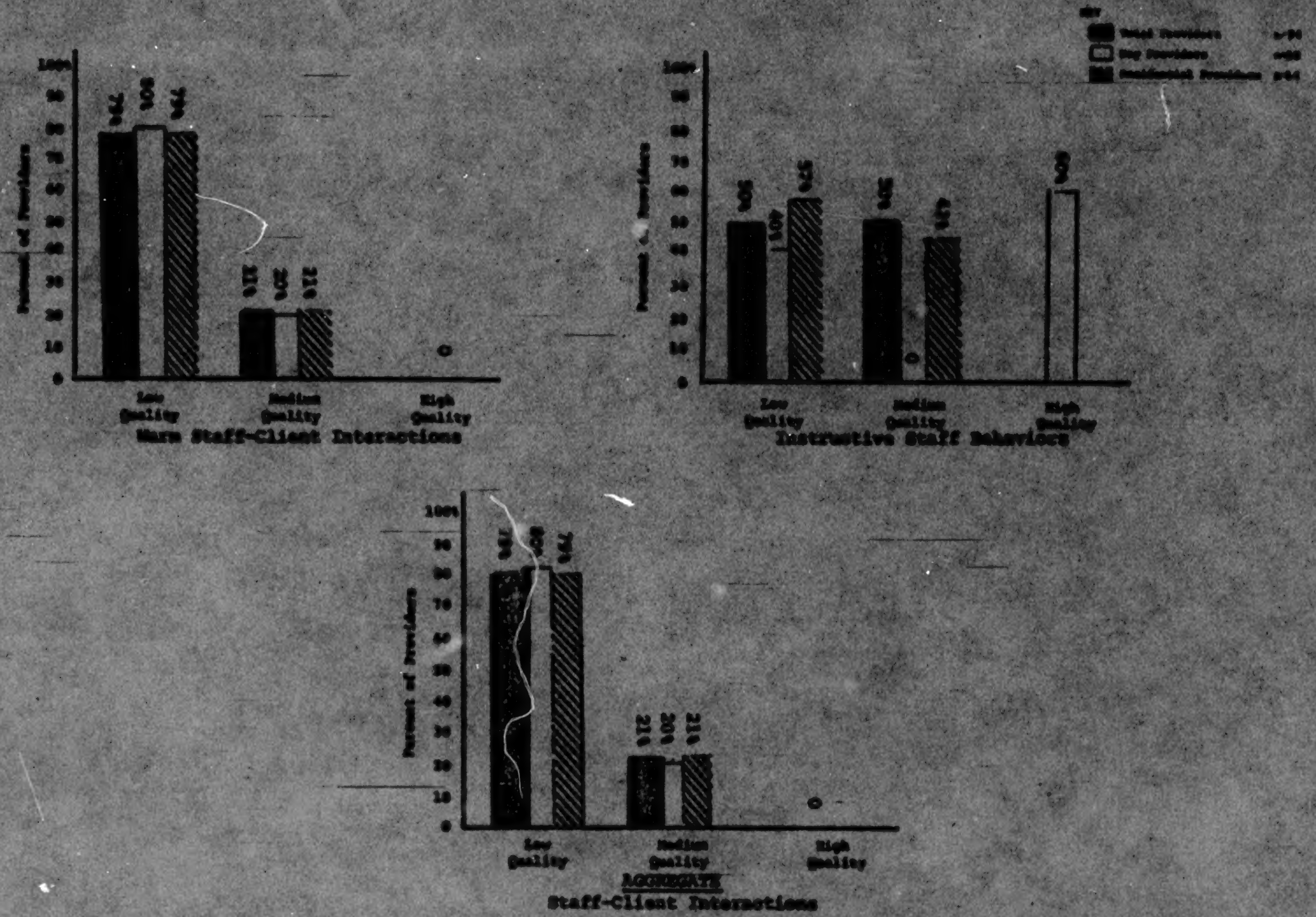


Amount of Client Time Spent on Educational/Habilitative Activities

AGGREGATE
Educational/and Habilitative Opportunities

FIGURE MH-3

QUALITY OF EDUCATIONAL AND HABILITATIVE OPPORTUNITIES IN PROVIDERS SERVING SEVERELY MULTIPLY-HANDICAPPED CHILDREN AND YOUTH



Warm Staff-Client Interactions

Instructive Staff Behaviors

AGGREGATE

Staff-Client Interactions

FIGURE MH-4

QUALITY OF STAFF-CLIENT INTERACTIONS
IN PROVIDERS SERVING SEVERELY MULTIPLY-HANDICAPPED CHILDREN AND YOUTH

(1) Parent involvement in the planning and operations of the provider; and

(2) Parent involvement with the handicapped clients.

Day providers were of higher quality than the residential providers in terms of parent involvement with the provider. Residential providers, however, scored higher than the day providers on parent involvement with handicapped clients.

Figure MH-5 displays the distribution of day, residential and total providers on the overall quality of parent involvement and on the 2 component variables.

5.4 Quality of Humanization of Institutional Setting

The quality of humanization was high in 17% of the providers, medium in 75%, and low in 8% of the providers. The humanization of a provider was measured by 5 component variables:

(1) Provider's respect for clients;

(2) Client privacy;

(3) Noninstitutionalized environment;

(4) Provider's policies regarding personal possessions of clients; and

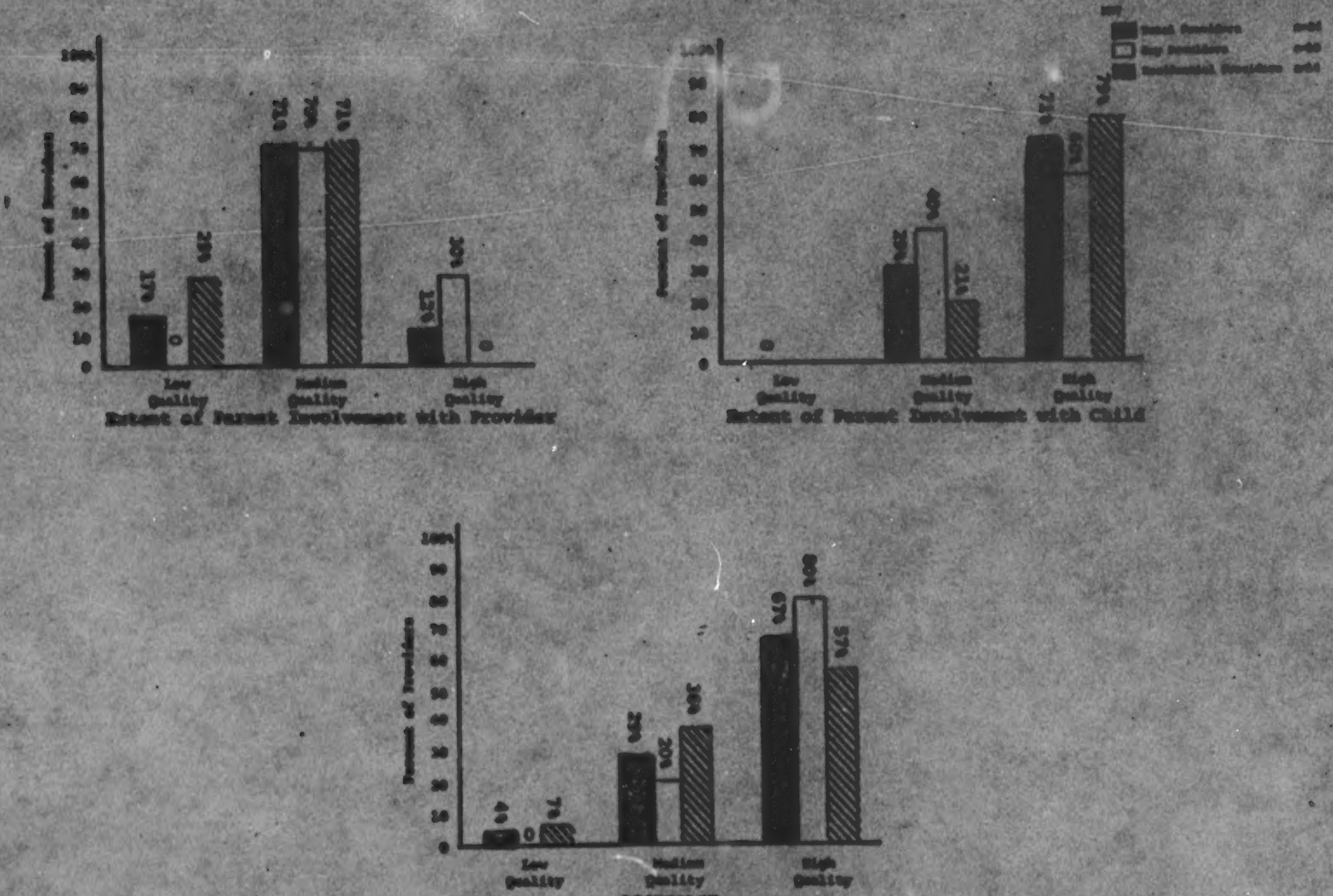
(5) Physical comfort of the provider.

With the exception of physical comfort, day providers scored higher than residential providers on these component variables.

Figure MH-6 shows the distribution of day, residential and total providers on the overall quality of humanization and on each of the 5 component variables.

5.5 Quality of Extent of Training and Evaluation

The quality of extent of training and evaluation was high in 46% of the providers, medium in 46%, and low in 8% of the providers serving a majority of multiply-handicapped children and youth. This aggregate quality variable measures the extent to which a provider:



AGGREGATE
Parent Involvement

FIGURE MH-6

QUALITY OF PARENT INVOLVEMENT
IN PROVIDERS SERVING SEVERELY MULTIPLY-HANDICAPPED CHILDREN AND YOUTH

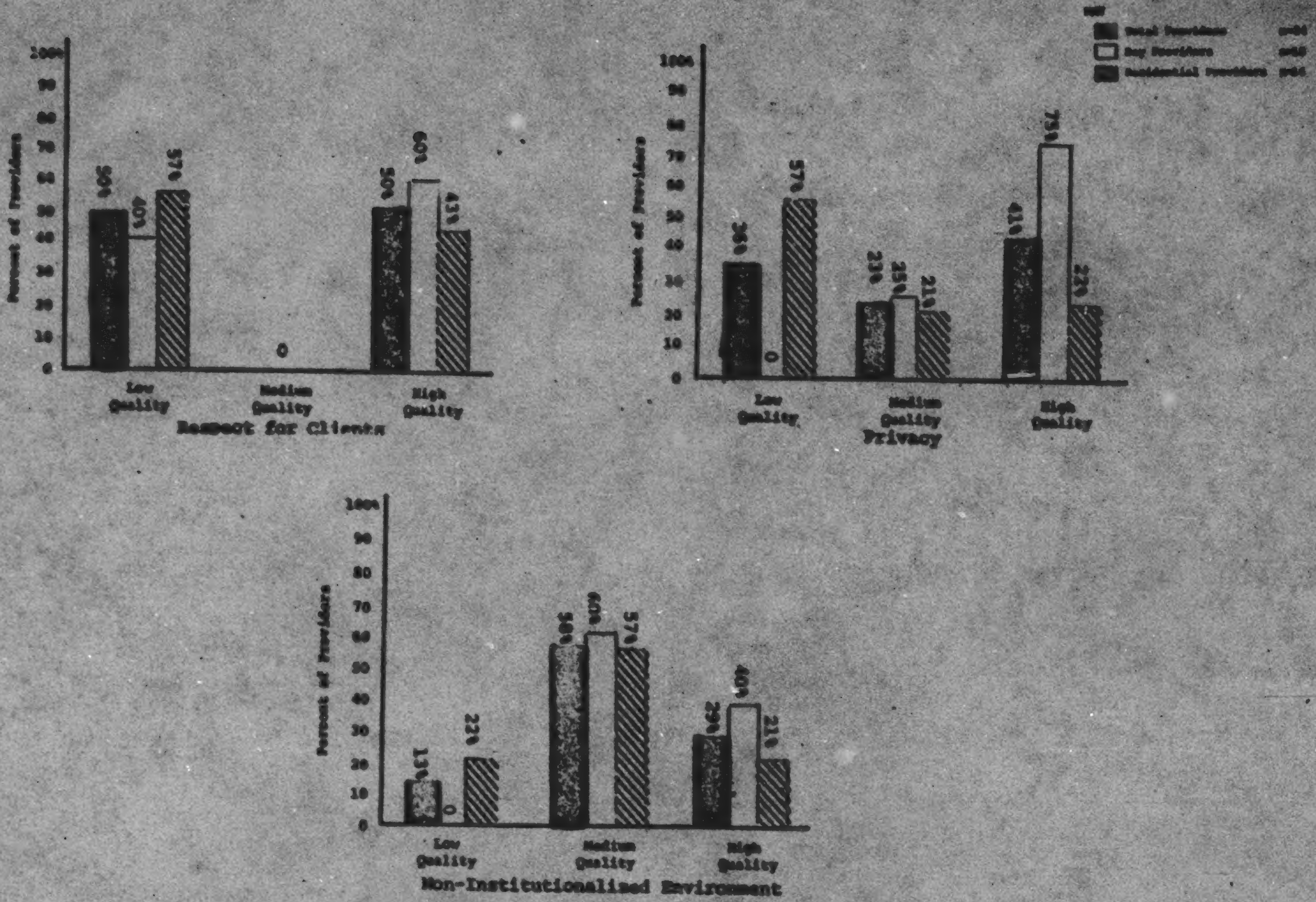
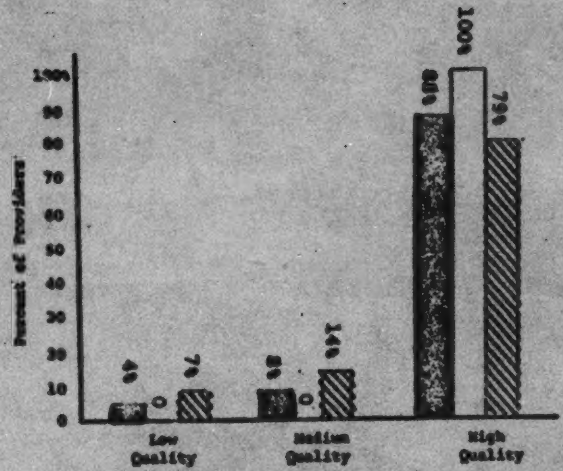
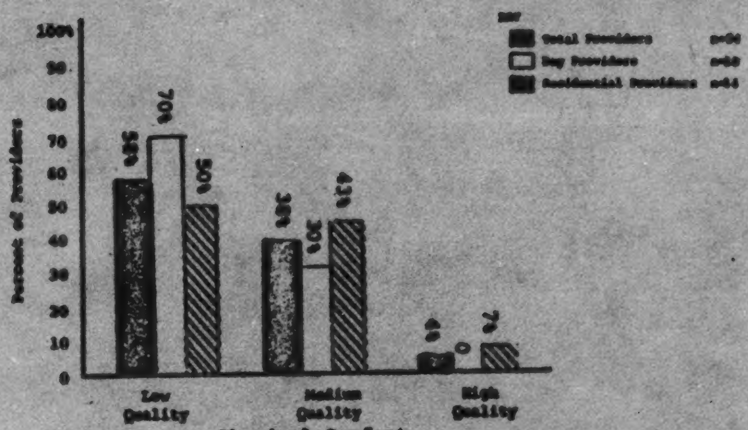


FIGURE MH-6

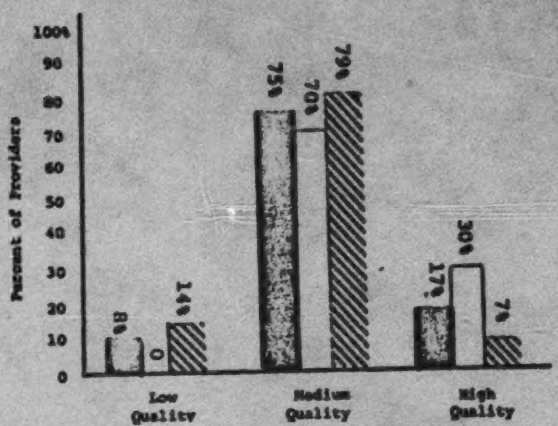
QUALITY OF HUMANIZATION OF INSTITUTIONAL SETTING
IN PROVIDERS SERVING SEVERELY MULTIPLY-HANDICAPPED CHILDREN AND YOUTH



Personal Possessions



Physical Comfort



AGGREGATE

Level of Humanization

FIGURE MH-6 (CONTINUED)

QUALITY OF HUMANIZATION OF INSTITUTIONAL SETTING
IN PROVIDERS SERVING SEVERELY MULTIPLY-HANDICAPPED CHILDREN AND YOUTH

(1) Assesses client progress;

(2) Evaluates its educational and habilitative services and/or its overall program of services; and

(3) Offers staff training.

Day providers were of higher quality than residential providers in terms of client assessments. The quality of program evaluations and of staff training opportunities was higher in the residential providers than in the day providers.

Figure MH-7 displays the distribution of day, residential and total providers on the overall quality of extent of training and evaluation and on each of the 3 component variables.

5.6 Quality of Evidence of Client Movement

Evidence of client movement out of the provider was of high quality in 30% of the providers, medium quality in 33%, and low quality in 37% of the providers. This aggregate variable measures the extent to which:

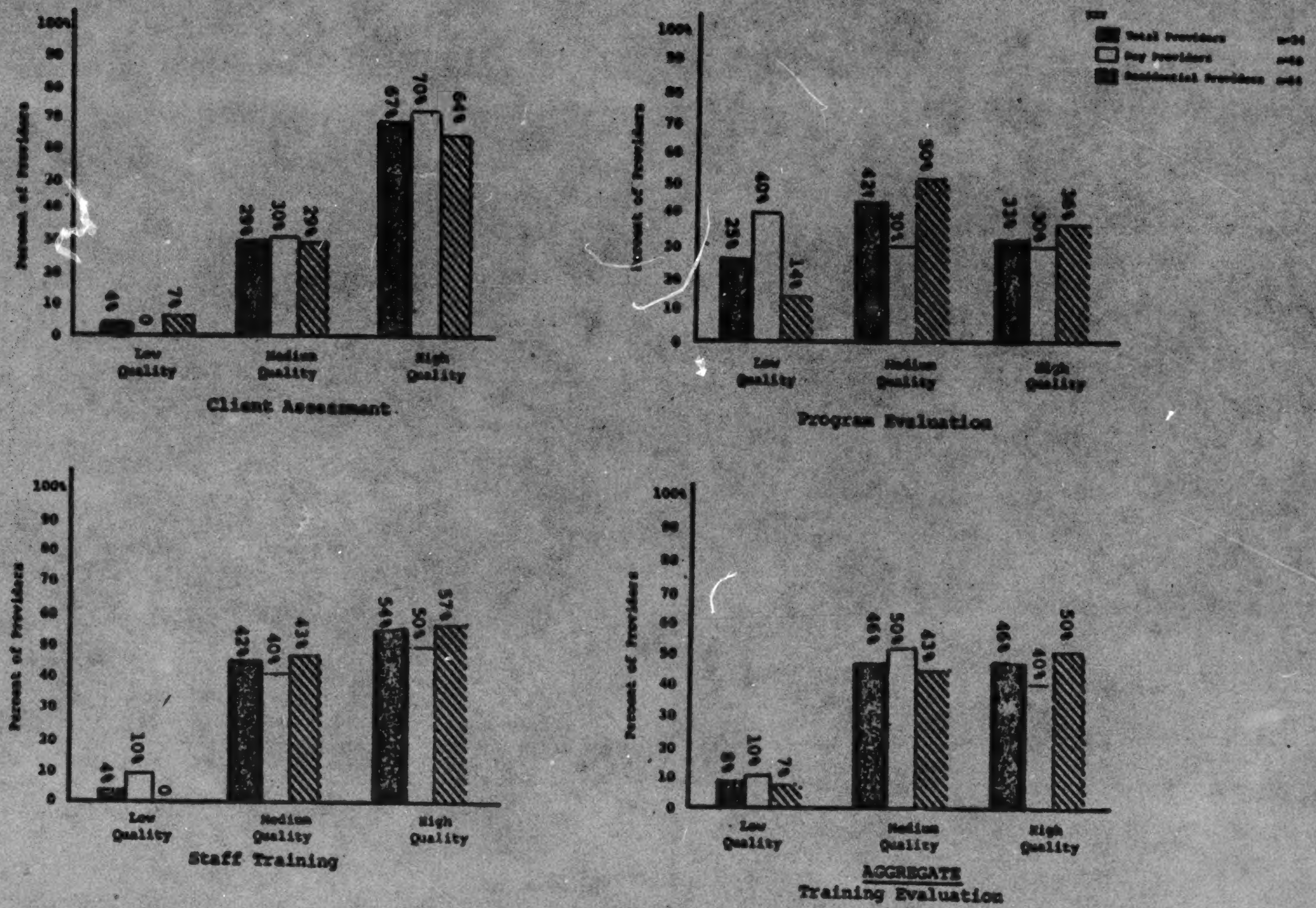
(1) A provider has released clients because their level of functioning improved;

(2) A provider has released clients to less sheltered settings; and

(3) Released clients are receiving educational and habilitative services following discharge from the provider.

Day providers proved to be of higher quality than residential providers in terms of releasing clients to less sheltered settings. Residential providers, however, scored higher than day providers in terms of released clients receiving educational and habilitative services after discharge. Both day and residential providers scored equally in terms of releasing clients due to the fact that their functional level improved.

Figure MH-8 shows the distribution of day, residential and total providers serving a majority of severely multiply-handicapped children and youth on the overall quality of evidence of client movement and on each of the 3 component variables.



Client Assessment

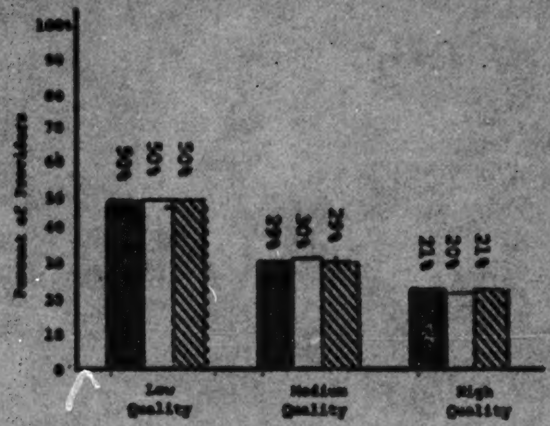
Program Evaluation

Staff Training

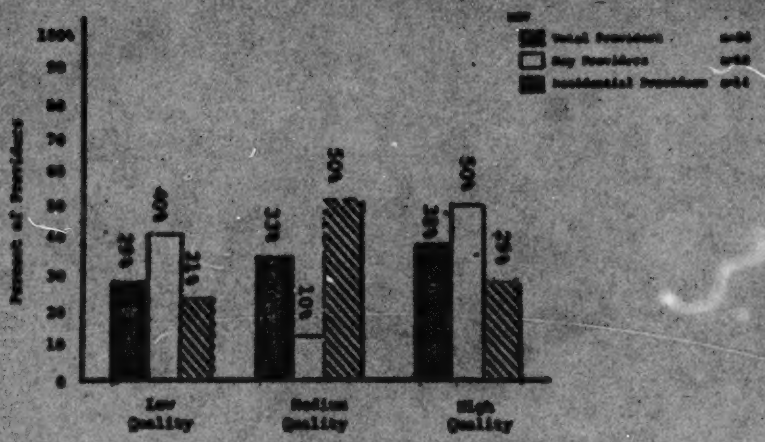
AGGREGATE
Training Evaluation

FIGURE MH-7

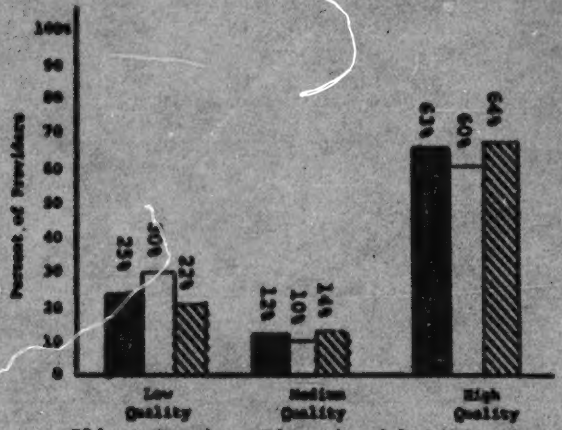
QUALITY OF EXTENT OF TRAINING AND EVALUATION IN
PROVIDERS SERVING SEVERELY MULTIPLY-HANDICAPPED CHILDREN AND YOUTH



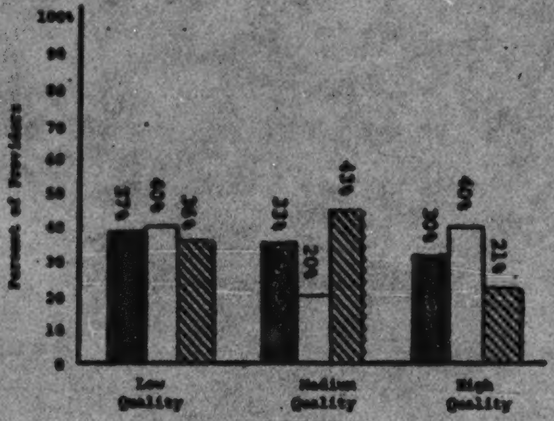
Client Level of Functioning Improved



Client Movement to Less Sheltered Settings



Client Receives Educational/Habilitative Services After Discharge



AGGREGATE
Evidence of Client Movement

FIGURE MH-6

QUALITY OF EVIDENCE OF CLIENT MOVEMENT

CHAPTER VI

A CASE STUDY OF PROVIDERS OF SERVICES TO A MIXED POPULATION OF SEVERELY HANDICAPPED CHILDREN AND YOUTH

1.0 SUMMARY

A total of 31 providers out of the 100 included in the study serve a diverse population of severely handicapped children and youth, aged 21 and under. Eleven of the 31 providers are private nonprofit organizations, 4 are private profit-making organizations, and 16 are public facilities. Twelve of the providers service clients on a day basis only, while 14 providers are strictly residential, and 5 provide both types of care for this client group.

Almost twice as many severely handicapped clients aged 21 and under are being admitted annually to these providers than are being discharged (an average of 64 admissions compared with 33 discharges). Clients are discharged primarily because their level of functioning has improved. Discharged clients are placed in a number of different community and institutional settings where most of them receive some educational/habilitative services.

The overwhelming majority of the providers offer a wide range of services to the mixed population of severely handicapped children and youth, with educational/habilitative services and basic care being the most prevalent services offered as well as the services consuming the highest percent of staff time. Ninety-five percent of the severely handicapped clients aged 21 and under at the providers receive some educational/habilitative services; the average amount received per client per week is 29 hours. A wide range of professional and paraprofessional staff provide these educational/habilitative services, with teachers, therapists, and teacher aides being the most important contributors. Behavior modification is the educational technique used most frequently. Instruction in motor and self-help skills is the most frequently offered educational/habilitative service.

Almost three-quarters of the providers were formally evaluated during the last 5 years. These providers are evaluated at least once a year, mostly by government licensing and funding agencies, and/or by internal staff for purposes of program development, licensing or funding. Providers perceive their major strengths to be in the area of staff commitment and in the quality of the treatment/education programs offered; major weaknesses are perceived as lack of funds, professional staff, and facilities/equipment. All the providers regularly assess their clients' level of functioning using a wide range of standardized and provider-developed tests.

The most frequently employed staff are teachers (certified and noncertified), and attendants. Most staff are white women. The overwhelming majority of the providers offer some type of formal staff training.

In virtually all providers serving a mixed population of severely handicapped clients, there is some form of parent involvement both with the provider and with the clients. The most frequent parent activity is staff conferences with parents about their child. All residential providers allow parent visits, with the vast majority allowing visits at any time. About one-third of the clients receive monthly family visits; less than one-third visit their homes once a month.

Most providers have a variety of community ties including opportunities for their severely handicapped clients to interact with nonhandicapped people, receipt of donated goods and services, and various public relations efforts. Volunteers are used in over 80% of the providers on a regular basis to provide a variety of direct care services, with assistance in educational services being the most common volunteer activity.

The most frequently reported changes in provider services and characteristics over the last 5 years have been in the areas of enrollment size, levels and sources of funding, policy control/management, and the range and type of educational approaches/materials offered. As a result of new legislation such as state right-to-education laws providers anticipate changes in their relationship to public schools, in the types of programs offered and number of professional staff employed. Most providers anticipate increases in client enrollment, decreases in length of enrollment, and decreases in the age of clients served.

Most observations of severely handicapped clients and the staff serving them took place in classroom settings. The condition of these settings was excellent in the majority of instances. A wide range of activities were taking place during the observations, and the average staff:child ratio was approximately 1:3.

The average annual *per capita* cost in providers serving severely handicapped clients is $8,545. An average of 77% of this cost is attributable to personnel expenditures. Within personnel expenditures, an average of 67% of the costs can be attributed to provision of *direct care* to clients, which constitutes an average of 50% of the total annual *per capita* costs. The most important funding source for the 31 providers was the state government. Federal and local governments were also mentioned as important funding sources.

Overall, providers were of *high* quality on educational and habilitative opportunities; *medium* quality on parent involvement, humanization of institutional setting, extent of training and evaluation, and evidence of client movement; and *low* on the quality of staff-client interactions.

The major differences that emerged between day and residential providers are that day providers were of higher quality than residential providers on 12 of the individual quality items. Residential providers cost more than 2.5 times as much as day providers on a *per capita* annual basis; residential providers spend about 1.5 as much as day providers on educational/habilitative services to provide clients with approximately 1.5 times as much educational/habilitative services per week.*

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*Note: two factors should be considered in comparisons of quality between day and residential providers:

(1) No attempt was made in this study to assess the comparability of the severely handicapped populations in day versus residential providers; therefore differences in quality may actually reflect differences in the needs and characteristics of the populations served; and

(2) Residential providers are concerned with provision of 24-hour care and are therefore different in scope and purpose from day providers, with a far heavier emphasis on basic care services.

2.0 OVERVIEW

A total of 31 providers out of the 100 included in the study serve a diverse population of severely handicapped children and youth aged 21 and under.* Included here are providers serving varying combinations of severely mentally retarded (31% of clients), severely emotionally disturbed (18%), deaf-blind (2%), and severely multiply-handicapped clients (50%) aged 21 and under. Eleven of the 31 providers are private nonprofit organizations, 4 are private profit-making organizations, and 16 are public facilities.

Twelve of the 31 providers serve clients on a day basis *only*, while 14 providers are strictly residential and 5 provide both types of care for this client group. All services are provided at the facility; no clients are formally served in their homes or foster homes.

Despite the variety of handicaps served by these providers, their goals are strikingly similar. All intend to develop clients to their maximum possible potential. Normalization, socialization and remediation are the most frequently mentioned ultimate goals and early identification and intervention are 2 key factors in their achievement. Most providers indicate that their goal in educating these clients is to give the client a feeling of pride and dignity and to prepare her/him for "as useful and happy a life as is possible." According to the directors of these providers, successful training should prepare the client for placement in 1 of a number of areas such as regular public school, specialized day programs, or sheltered workshops. In some cases, successful training may permit the client to live at home or in a foster home, thus preventing institutionalization.

Goals of treatment are specified for each individual and range from providing good maintenance (1 provider indicated that a goal for 1 client was to prevent contractures), all the way along a continuum to preparing clients to live and work in the community. Other goals are directed toward parents and the community, research and program development, and appropriate staffing and training for provider personnel. The providers aim to give support, information and opportunity to the parents for the promotion of better family interaction and to educate the community with regard to the handicapped.

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*Note: when the term "providers" is used throughout this case study, the referent is the 31 providers which serve a mixed group of severely handicapped clients, aged 21 and under.

The 31 providers serving this mixed group of handicapped clients aged 21 and under are fairly evenly distributed across states with the largest concentration of providers in the midwest (13). There are 12 providers located in the eastern United States and 6 in the west. The facilities are situated in both suburban (46%) and rural (32%), as well as in urban settings (23%).

3.0 CHARACTERISTICS OF PROVIDERS

3.1 Client Characteristics

In 60% of the 31 providers, there are no mandated age limits for client admittance. The average age of admittance of the youngest group of clients admitted is approximately 4 years; the average of the oldest clients admitted is 35 years. Currently, the age range of severely handicapped clients presently being served at the facilities is between 0 and 99 years.

The distribution of clients by ethnicity is shown in Table MIX-1.

Table MIX-1

Ethnic Distribution of Clients

Ethnic Origin	Average % of provider population	Range
White	81%	32-100%
Black	14%	0-48%
Spanish surname	4%	0-33%
American Indian	0.6%	0-14%
Oriental	0.4%	0- 7%
Other	0.1%	0- 4%

In most cases, more than half the population is male (60% average) with a range of from 0 to 100%. The female population accounts for an average of approximately 40% with a range from 0 to 100%. The estimates of time needed for clients to reach self-sufficiency in toileting, dressing and self-feeding skills vary considerably between day and residential providers. It is estimated that residential clients could reach self-sufficiency in an average of 9 years, 7 months, whereas day providers estimate an average of 3 years for a client to become self-sufficient. One provider indicated that its residents would never reach self-sufficiency.

The average length of stay for clients in residential providers is 6 years; the average stay for clients in day providers is 5 years, 6 months.

3.2 Enrollment

3.2.1 Admission

Many of the providers which primarily serve mixed groups of handicapped children and youth are mandated to serve clients of particular ages, types and severity of disability. Eleven providers are mandated to serve all disabilities; all of the others report mandates to serve clients with 2 or more handicaps. Mandates also apply to levels of severity. The most frequently reported mandates are to serve only severely handicapped clients (42% of the providers), and to serve the moderately handicapped (32% of the providers). The average number of persons applying for admission to these providers between July, 1973 and May, 1974 was 64, with a range from 0 to 650 applicants across the total group. The acceptance rate was approximately 64% across the 31 providers, or 5% of the severely handicapped children and youth currently enrolled.

In addition to the above criteria for acceptance, many providers indicate that a client must clearly be able to benefit from the treatment before acceptance into the facility. Most applicants must be residents of the state in which the provider is located. Some providers also require demonstrable financial support for all prospective clients.

Requisite client characteristics vary depending on the nature of the handicapping conditions served, the presence or absence of medical care at the facility, and/or the educational or emotional climate of the provider. Whether or not the client requires skilled nursing care, whether s/he is ambulatory or non-ambulatory (if non-ambulatory, low client weight is often a criteria for admission), whether mobile and educable, and whether there is a good prospect for self-sufficiency are all prime considerations for client admission. In many cases clients must be referred by a local mental health agency, diagnostic center or by a physician. To perform a service to the family and community, providers will often accept clients if there is an emergency or crisis within the family or community.

Ten of the 31 providers currently maintain a waiting list for their services. These providers, which are residential, have an average of 13 persons on the waiting list, and an average waiting period of 8 months. Four residential providers have a minimum and maximum length of enrollment for clients (2 months minimum; 9 years, 5 months maximum). One day provider has a minimum length of enrollment and 4 day providers report a maximum length of enrollment (2 months minimum; an average of 12 years maximum).

Given their current resources, 43% of the providers feel that they could serve more clients (on the average, 22 more clients); 37% feel that they are currently operating at full capacity; and 17% feel that they should be serving fewer clients.

3.2.2 Discharge

In 10% of the providers, no clients were discharged between July, 1973 and May, 1974. An average of 33 clients were discharged across providers. Table MIX-2 illustrates the reasons for which these clients were discharged and the average percent of clients discharged for each reason during the 1973-74 period.

Table MIX-2

Reason for Client Discharge from Providers

Reasons for discharge	Average % of clients discharged	
	Day	Residential
Clients reached maximum age	2%	5%
Functional level improved	49%	35%
Functional level deteriorated	6%	10%
Family removed client	12%	7%
Funding level reduced	0	4%
Client died	9%	18%
Other	22%	15%

Of the clients discharged, the largest group from both residential and day providers were placed in or remained in their family home. Foster homes received an almost equal percentage of residential and day clients. Only a very small percentage of clients from day providers went to group homes, nursing homes or to a residential facility. In contrast, of the discharged residential clients, 17% went to group homes, 14% to nursing homes and 12% to another institution.

Of these discharged clients, 83% from day providers and 68% from residential providers are currently receiving educational or habilitative services. The majority of these clients are receiving these services in local public or private schools, specialized day programs or residential facilities.

3.3 Services Offered to Severely Handicapped Children and Youth*

The overwhelming majority of the 31 providers which serve a mixed group of severely handicapped children and youth offer a wide range of services to this group. Table MIX-3 displays the type of service provided, the percent of providers which offer the service and the average percent of staff time spent in providing the service to severely handicapped clients. As reported in providers serving a mixed group of severely handicapped clients, staff spend the greatest portion of their time providing educational and habilitative services and basic care services to this client group.

Table MIX-3

Services Offered to Severely Handicapped Clients

Service component	Percent of providers offering the component			Average staff time spent providing the service		
	Total n=31	Day n=12	Residential n=19	Total n=31	Day n=12	Residential n=19
Basic Care	94%	92%	95%	29%	15%	38%
Educational/habilitative services	97%	100%	95%	50%	65%	41%
Medical services	68%	50%	79%	4%	1%	6%
Family and community services	87%	100%	79%	5%	7%	4%
Diagnostic and referral services	90%	83%	95%	6%	6%	6%
Administration	84%	92%	79%	6%	8%	5%
Support services	74%	58%	84%	2%	2%	3%

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*Note: for a description of the 7 service components and the 12 staff categories used in the study, see pages 4-7 of the Introduction to this volume.

Staff in residential providers spend more than twice as much time providing basic care services, and 5 times as much time on medical services as do staff in day providers. It should be remembered, however, that residential providers operate for approximately 3 times the weekly hours of day providers.

3.3.1 Educational and habilitative services offered to severely handicapped children and youth

All of the 31 providers serving a mixed group of severely handicapped clients offer educational and habilitative services. Ninety-five percent of the severely handicapped population at the providers receive these services. On the average, each of the clients receives 29 hours per week of education or habilitation.

These services are delivered by a variety of professionals, as shown in Table MIX-4. As reported in providers serving a mixed group of severely handicapped clients, teachers, attendants and teacher aides are the staff who deliver most of the educational and habilitative services.

Residential providers report that each client receives 34 hours per week of such services, as opposed to 22 hours per week reported by day providers. Day providers report providing these services to 100% of their clients, while residential providers provide educational and habilitative services to 91% of this client group.

Teachers and teacher aides deliver 74% of the educational/habilitative services within day providers, as opposed to 43% within residential providers. Therapists deliver about 15% of the educational/habilitative services in day providers and 10% in residential providers, while attendants deliver 37% of these services in residential providers and only 3% in day providers.

Table MIX-4

Percent of Educational/Habilitative Services Delivered by Staff

Staff Category	Percent of educational/ habilitative services delivered		
	Total n=31	Day n=12	Residential n=19
Teacher (certified)	38%	52%	30%
Teacher (noncertified, aide)	17%	22%	13%
Attendant	23%	3%	37%
Nurse	.7%	.1%	1%
Therapist	12%	15%	10%
Social Worker	.3%	.7%	.1%
Psychologist	.1%	2%	.1%
Psychiatrist	.4%	0%	.6%
Medical Doctor	0%	0%	0%
Administrator	2%	4%	.5%
Support Staff	3%	0%	4%
Other Staff	2%	1%	3%

The most common educational/habilitative objective across the 31 providers serving a mixed group of severely handicapped clients is concerned with improving client functioning in a variety of skill areas, particularly self-help skills.

Instruction in motor and self-help skills is offered most frequently by the providers. Table MIX-5 displays the types of instruction offered to mixed groups of severely handicapped clients.

In day providers, speech therapy is provided most often, while residential providers most often provide training in self-help skills.

Offered least often by day providers is prevocational training, while residential providers offer training in socialization skills least often.

Table MIX-5

Skills Training Offered to Severely Handicapped Clients

Instructional area	Number of providers offering skill training
Motor skills	15
Self-help skills	15
Academics	14
Language skills	14
Recreation	14
Pre-academics	11
Vocational skills	11
Speech therapy	10
Physical therapy	9
Prevocational skills	8
Socialization skills	8

The educational techniques used by providers to achieve their educational and habilitative objectives are quite varied. As is evident from Table MIX-6, behavior modification is used in 25 of the 31 providers to teach severely handicapped clients a variety of functional skills.

Numerous extracurricular activities are offered to severely handicapped clients at the 31 providers including field trips to community areas (15 providers), swimming (15), music (14) and movies (10). Bowling, art and religious activities are offered by 25% of providers. Some providers offer scouting programs, participation in Special Olympics play therapy and foster grandparent programs to their clients.

There are no discernible differences in the types of extracurricular activities offered in day, as opposed to residential, providers.

Table MIX-6

Educational/Habilitative Techniques
Used by Providers

Educational/habilitative technique	Number of providers using technique
Behavior modification	25
Individual attention	8
Psychotherapy	8
Task analysis	6
Precision teaching	5
Individual programming	5
Repetition	5
Adaptive materials	4

3.3.2 Staff perceptions of resources available to clients

3.3.2.1 Materials. Across all providers, books and magazines and writing/drawing materials are most frequently available to severely handicapped clients. Writing and drawing materials are most often available in sufficient quantity for all severely handicapped clients to work with and books and magazines are most accessible (i.e., available at all times) to clients.

Day providers report that animals are least often available in sufficient supply and are least accessible to clients. In residential providers, animals are least often available, musical instruments are available in least sufficient quantity and toys are least accessible to clients.

3.3.2.2 Possessions. The majority (93%) of the residential providers serving a mixed group of severely handicapped clients report that these clients have their own clothing which is always returned to them following laundering.

Members of this client group also possess other personal articles (such as radios, stuffed animals, toys, etc.) in 93% of the residential providers sampled.

Ninety-seven percent of the residential providers report that severely handicapped clients have private storage areas available to them for storing personal articles.

3.3.2.3 Work opportunities for clients. Two-thirds of the 31 providers serving a mixed group of severely handicapped clients offer those clients the opportunity to earn money or credits. Four providers report that severely handicapped clients earn less than $1 per week; 4 report that clients earn from $1 to $5 per week and 5 report that clients earn more than $5 per week. Clients earn credits in 7 providers.

Severely handicapped clients acquire money and credits by performing a number of tasks as shown in Table MIX-7. Money and/or credits are earned primarily for tasks performed in a sheltered workshop.

Severely handicapped clients who earn money do so most often in sheltered workshops; clients earning credits do so most often by performing academic tasks successfully.

Opportunities to earn money are available in 50% of residential providers, as opposed to 25% of day providers.

Table MIX-7

Work Performed by Severely Handicapped Clients
for Money or Credits

Type of work performed by client	No. of providers where money is earned		No. of providers where credits are earned	
	Day	Residential	Day	Residential
Sheltered workshop	2	7		2
Janitorial	1	5		2
Care of other clients		5		
Food service		6		1
Laundry		5		2
Housekeeping		7		3
Grounds & maintenance	1	5		
Good behavior	1	1	2	3
Academic skills		1	3	4

3.4 Evaluation

3.4.1 Evaluation of provider services

Service components are formally evaluated in 22 of the 31 providers serving a mixed population of severely handicapped children and youth. Fifty-eight percent of the day and 79% of the residential providers formally evaluate their service offerings to severely handicapped clients. In most cases, evaluations are conducted regularly (annually or more often) by government licensing and funding agencies, and/or by internal staff. Evaluation results are most often used by providers for program development as well as for obtaining funding or accreditation. The service components most frequently evaluated among these providers are basic care, educational and habilitative services, and administration and staff support services. Most residential providers have also made evaluations of their medical services.

Seventeen of the 31 providers serving mixed populations had evaluations made of their educational/habilitative services between January, 1973 and May, 1974. Results of these evaluations, where available, indicate overall adequacy in meeting client developmental needs, with some recommendations to provide a wider range of services and to make more community outreach efforts.

Strengths of this group of providers as perceived by their directors are most often centered in competent and highly involved staff, and the treatment/education programs offered (e.g., infant stimulation, developmental learning, vocational rehabilitation). Individualized programming and an interdisciplinary approach to client habilitation/education are seen as strengths by directors, as is parent/community involvement. Other strengths mentioned include supportive administrative and legislative attitudes and an open and creative working atmosphere. Weaknesses mentioned by directors most often include lack of funds, professional staff shortages and inadequate facilities/equipment. Inadequate program evaluation, client assessment, publicity and outreach efforts are also mentioned as weaknesses. Lack of definition by and communication among state and federal funding agencies is sometimes viewed as a weakness by directors. Efforts are being made to overcome weaknesses in almost all providers serving mixed populations. These efforts most often take the form of budget requests and legislative action appeals. Other efforts involve working with parents, legislators, and government groups and developing relationships with local school districts and nearby universities.

3.4.2 Client assessment

Severely handicapped clients are assessed to determine their level of functioning and progress in all of the 31 providers serving mixed severely handicapped populations. The areas of client assessment and the ranges and mean percentages of clients assessed across sites are displayed in the table below.

Table MIX-8

Client Assessment

Assessment area	Mean % of clients assessed	Range of clients assessed
Self-sufficiency	92%	25-100%
Communication	86%	25-100%
Social and/or emotional competence	94%	25-100%
Intelligence	86%	0-100%
Academic skills	80%	0-100%
Other (motor development, perceptual, medical)	64%	0-100%

In most of these providers serving mixed groups of severely handicapped children and youth, clients are assessed regularly at intervals from once a week to once every 2 years; in a few providers, clients are assessed only on admittance and release. Procedures used in client assessment vary according to client needs in about half of the providers; in the remainder, all clients are assessed using the same procedures. Standardized assessment instruments employed most often include the Weschler Intelligence Scale for Children (WISC), the Peabody Picture Vocabulary Test, the Vineland Social Maturity Scale, and the Stanford Binet, with a wide variety of other standardized tests less often used. Provider-developed tests, scales and checklists are frequently used for client assessment, and ongoing observation and evaluation by professional staff in combination with staff conferences is an assessment method that is often used.

Results of client assessments are used in 87% of the providers serving mixed populations for developing instructional programs for clients. Less than half of the providers use assessment results for measuring client progress, for evaluating program components, for assigning clients to groups in providers and for assigning placements when clients leave. Assessment results are sometimes used for staff feedback, staff assignment, and communications with parents and agencies.

3.5 Provider Staff Characteristics

The average per capita full-time equivalent staff (based on a 40-hour week) who work with severely handicapped children and youth in the 31 providers serving mixed populations are shown by job category in Table MIX-9. Educational staff among day providers hold the highest ratio to clients (certified teachers, 1:7; aides, 1:9). Attendants (1:3) and support staff (1:3) show the highest staff:client ratios in residential providers serving mixed populations. Day providers have more teaching staff and social workers per client than do residential providers; in all other categories residential providers have slightly more staff for every severely handicapped client served.

The total weekly overtime hours worked across this group of providers ranges from 0 to 360, with an average of 21 overtime hours per week. Administrators work the most overtime hours in 29% of the providers serving mixed populations; psychologists and teachers each work the most overtime in 23% of the providers. In day providers, teachers are the direct care staff who most often work overtime; in residential providers psychologists and social workers put in the most overtime hours.

Table MIX-9

Average Full-Time Equivalent Staff per Client

Staff category	Average full-time equivalent staff per client		
	Total n=31	Day n=12	Residential n=19
Teacher (certified)	.10	.15	.08
Teacher (noncertified, aide)	.07	.11	.05
Attendant	.22	.03	.34
Nurse	.03	.01	.05
Therapist	.03	.02	.03
Social worker	.01	.02	.008
Psychologist	.01	.01	.01
Psychiatrist	.001	-0-	.001
Medical doctor	.003	.001	.005
Administrator	.12	.08	.15
Support staff	.20	.03	.31

The average percent of women staff members across this group of providers is 74%, with a range from 0% (in 2 providers) to 100% (in 7 providers). Nonwhite staff members average 22%, ranging from 0% in 8 providers to 100% in 1 provider; among residential providers the nonwhite staff average is 25%, while day providers show an average of 16% nonwhite staff.

Eighty-seven percent of the providers serving mixed populations provide formal training opportunities for their staff members. Pre-service training takes place in 64% of the providers as a means of orientation to the provider, preparation for dealing with client problems and making effective use of the resources available. In-service training opportunities (workshops, seminars, conferences) exist in 93% of these providers and course work is partially or fully paid for in 61%, both to increase staff knowledge and competency in serving clients and to support professional advancement. Residential providers among this group provide pre-service training substantially more often than do day providers (71% residential, 55% day); in-service training and course work opportunities are offered about equally in day and residential providers of this group.

3.6 Parent Participation and Community Involvement in the Providers

3.6.1 Parent participation

In 29 of the 31 providers serving a mixed population of severely handicapped children and youth, parents participate in various aspects of the program. Discussions between staff and parents about their child is the most frequent form of parent participation; an average of 68% of the parents across providers participate in such discussions. Thirty-five percent of the parents participate in parent groups. According to staff estimates, an average of 37% of the parents across providers participate in the planning and delivery of services to their child. The majority of the staff interviewed estimate that parent involvement has a moderate to high impact on the child's progress.

Figure MIX- 1 displays the types of parent involvement activities and the percent of parent participation in each activity in day and residential providers serving a mixed population of severely handicapped children and youth.

In 79% of the residential providers, parents are allowed to visit their child at any time. In the remaining 21%, parents can visit on special occasions or by appointment. An average of 32% of the clients across these providers never receive visits from family members, 33% receive visits less than once a month, and 35% receive visits at least once a month.

In 56% of the providers, there is no public transportation available to and from the facilities. In 22% of the providers, public transportation is available less than once an hour, and in 22% of the providers,

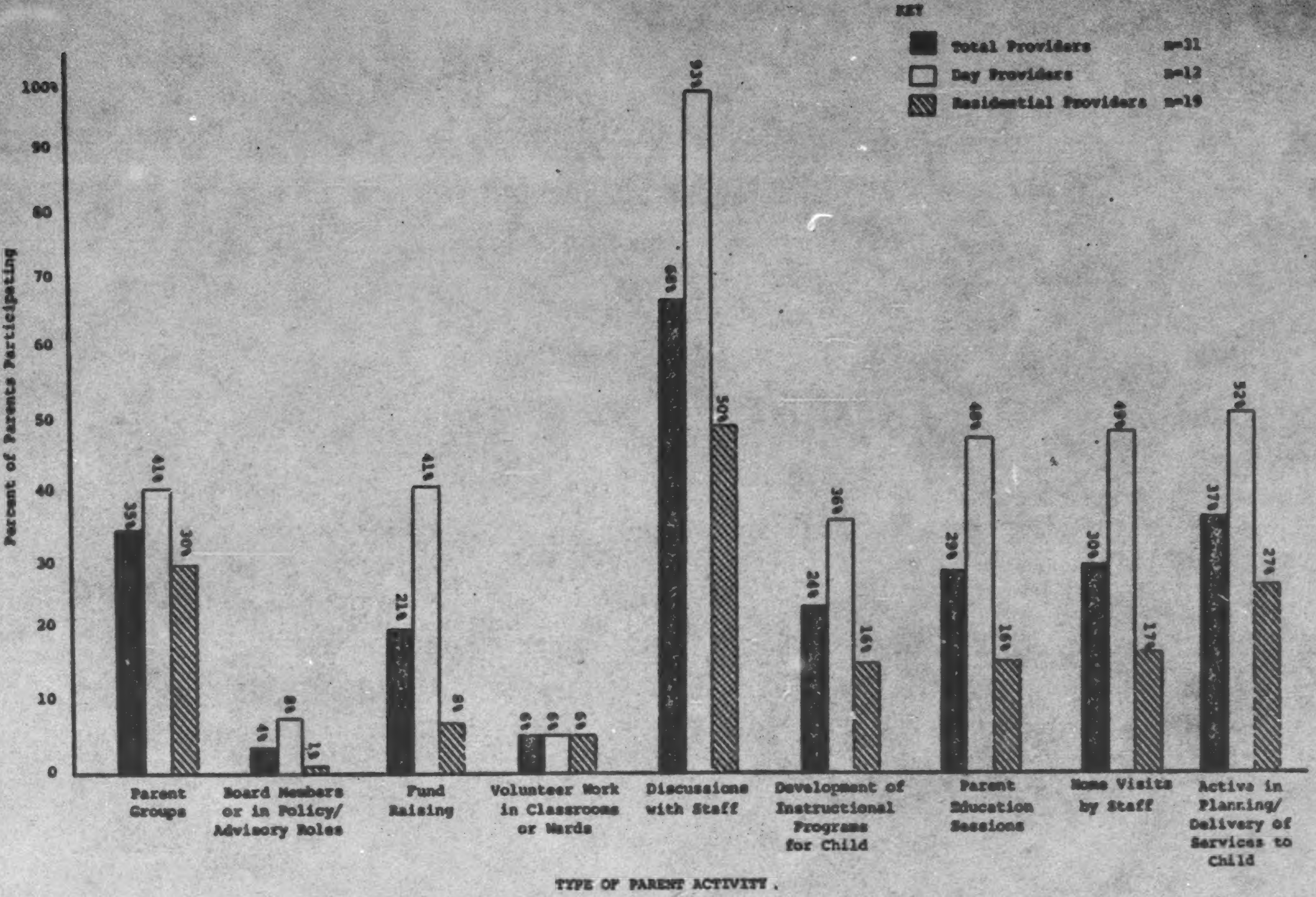

FIGURE MIX-1

EXTENT OF PARENT INVOLVEMENT
IN PROVIDERS SERVING A MIXED POPULATION OF SEVERELY HANDICAPPED CHILDREN AND YOUTH

at least once an hour. Private cars are the major means of transportation for families to and from the facilities in 95% of the providers.

An average of 40% of the clients across providers never go home to their families for visits; 41% visit home less than once a month, and 29% visit their families at home at least once a month. Seventy-nine percent of the providers offer incentives to parents to take their child home for visits. Many providers contact families by telephone and letter to encourage home visits. Other techniques include close contact with parent groups, payment of transportation and other home visit expenses to families of clients. One provider disseminates information to families on defraying the costs of home visits through the use of Medicare and Medicaid funds.

3.6.2 Community involvement

In 83% of providers, severely handicapped clients have opportunity to interact with nonhandicapped peers through high school and college volunteer programs. Field trips to community facilities and attendance at religious services in the community are offered by many providers. Shopping trips, use of recreational facilities in the community, and participation in local scout troops are other opportunities offered by some providers. In some cases, visits by children of staff members provide severely handicapped children with opportunities to interact with nonhandicapped peers.

In 77% of the providers, various goods and services are donated by the local communities surrounding the providers. Donated goods from the community include cash, play and learning materials, special equipment, food, parties and presents, physical facilities, free meals at restaurants and theater tickets. Services donated include transportation, screening and evaluation, staff training, clinical services (medical, psychological, vocational, speech, psychiatric), educational supervision, testing, fund raising, construction, and maintenance labor.

A variety of approaches are used by providers to attract greater community involvement in their programs. The most frequently cited approaches include: speaking engagements by staff to interested community groups, publication of newspaper articles, newsletters, and brochures about the provider, coverage by radio and television, and open house tours and visits of the facilities. Other techniques used less often include sponsoring public relation booths at local fairs, presentation of slides and films on providers, invitations to community groups to use the physical facilities of the providers, teaching demonstrations, and workshops for community members.

Eighty-three percent of the providers utilize volunteers on a regular basis. The average per capita number of regular volunteers is 2.9 among day providers, .6 among residential providers. The volunteers work a mean total of 3.1 hours per client per week, 8 hours in day providers, 1 hour in residential providers. Assistance in educational instruction is the most frequent type of volunteer activity across the providers. Volunteers work with clients individually and in small groups in such educational areas as teaching self-help skills, reading, tutoring, evaluating, and monitoring of classroom activities. Supervision in recreation and play activities such as field trips, parties, sports and dances are also frequently undertaken by volunteers. Other volunteer roles include assisting in the basic care of residents (dressing, feeding, toileting), in therapeutic activities such as physical and occupational therapy and counseling, developing one-to-one companion relationships, assisting in the transporting of clients to various activities, and in religious instruction.

3.7 Changes in Provider Services

Over 80% of the directors of the providers serving a mixed population of severely handicapped clients aged 21 and under indicate that there has been important change over the past 5 years in the area of enrollment size (most day providers show increases; most residential providers show decreases). All of the day providers and 68% of the residential providers have experienced higher levels of funding and changes in funding sources. Two-thirds or more of the providers have seen changes in the areas of policy control/management (e.g., decentralization, better organization), the number of staff employed (increases in almost all providers), the educational approaches/materials used (more materials and equipment, emphases shifting to the individual away from custodial care toward habilitation), and the range of services offered (almost all indicate expansion and the addition of new programs).

Day providers have changed more than residential providers in the educational approaches and materials used (82% day, 68% residential) and in the range of services offered (73% as opposed to 63%). Residential providers have changed more in enrollment capacity (down significantly in most residential providers), the severity level of clients served (more severe handicapping conditions among clients in most cases), criteria for discharge of clients (better defined, more effort to return clients to community), and philosophical orientation (emphasis on the quality of services to the individual and on the development/rehabilitation of clients). Fifty-eight percent of the residential providers have had changes in living arrangements for clients, most with the establishment of smaller living units and an emphasis on normalization and independence.

Eighty percent of the directors feel that recent legislation will have a significant effect on their provision of services to severely handicapped children and youth. Right-to-education laws are mentioned most frequently as an important impetus in redefining the relationship of public schools to providers and their respective responsibilities. Legislation to protect client rights (especially with regard to institutional commitment and research) is seen as an important change agent, and legislation that affects funding will lead to redefinition of program goals, provision of contracted services, better record keeping and, unfortunately, more paperwork.

Future changes anticipated by directors of these providers most often include new and updated facilities, development and addition of programs (vocational education is often mentioned), addition of professional staff, changes in enrollment size (most foresee increases; some expect decreases), and decreases in length of client enrollment. Many directors think they will be serving younger populations in the future, and that there will be more parent and community involvement in the provision of services and a closer working relationship with public education facilities. Directors of 55% of the day providers and 84% of the residential providers state that they would need new facilities if they were to experience a 25% increase in enrollment.

4.0 OBSERVATIONS OF SEVERELY HANDICAPPED CHILDREN AND YOUTH AND THE STAFF SERVING THEM*

4.1 Description of Settings Observed

A total of 1,020 time-sampled observations were taken in the 31 providers serving a mixed population of severely handicapped children and youth. Observations were conducted in settings within each provider where severely handicapped clients typically spent their days. The most frequently observed settings were classrooms (53% of the observations) and living rooms (9% of the observations). Other settings in which observations were taken in order of frequency were: workshops, dining areas, gyms and auditoriums, therapy rooms, bedrooms or bathrooms, outside areas such as playgrounds, and wards. In 77% of the observations, the condition of the interior of the buildings was excellent. In the vast majority of observations no antiseptic or noxious odors were present in the setting.

In settings with sleeping accommodations, sleeping areas were very private in 11% of the observation cases, somewhat private in 46%, and not private in 43% of the cases. Toileting facilities tended to be more private than the sleeping accommodations, with very private toileting areas in 58% of the observations, somewhat private areas in 22%, and in 20% of the observations toileting areas were not private at all. There was a low level of institutionalization (homelike as opposed to a sterile environment) in 52% of the observations, a moderate level in 32%, and a high level in 16% of the observations. A low level of institutionalization was about twice as frequent in observations of the day providers as residential providers.

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*Note: for a description of observation procedures used in the study and operational definitions of items on the Observation Schedule, see pages 8-10 of the Introduction to this volume.

4.2 Description of Activities Observed

There was a variety of activities occurring during the observations of the severely handicapped clients in these providers. Table MIX-10 displays the types of activities and the corresponding percent of observations in which these activities occurred.

Table MIX-10

Types of Activities Observed

Type of Activity	Frequency of occurrence (Percent of total observations)
Educational	32%
Recreational	16%
Mealtime, Snacktime	14%
Free Play	9%
Vocational	5%
Self-care	4%
Naptime	4%
Therapy	3%
Basic care	1%

No organized activities occurred in 12% of the observations. The general activity level was low in 25% of the observations, moderate in 45%, and high in 30% of the observations. Behavior modification was used in 22% of the observations.

Adequate play and learning materials were available to severely handicapped clients in 74% of the observations. There were no play materials available to these clients in 7% of the observation cases and only some materials in 19%. The condition and quality of the available materials was high in more than half of the cases.

In 96% of the observations, clients were adequately clothed. Male and female clients were grouped together in various settings in 73% of the observations. In 58% of the observations, clients were grouped homogeneously with other children of similar levels of disability.*

The average number of clients in a setting was 9 with a range from 1 to 66. The average number of staff per setting was 3, with a range from 0 to 25. The average staff:child ratio was 1:3, ranging from a high of 1.5:1 to a low of 1:20.

Day and residential providers serving mixed populations of severely handicapped children and youth differed in many respects. Educational activities were approximately 1.5 times more frequent and free play 3 times more frequent in day providers than in residential providers. Therapy and vocational activities, however, were 2.5 times more frequently observed in residential providers than in the day providers. In less than 1% of the observations of day providers, no organized activities were observed; in 17% of the observations of residential providers, however, there were no organized activities observed. A high level of activity was observed 1.5 times more frequently in the day providers than the residential providers. Play materials were more available, in better condition, and of higher quality in the day, as opposed to residential, providers. An absence of play materials was observed in less than 1% of the observations of day providers, and in 10% of the observations of residential providers. The average staff:child ratio was 1:2 in day providers, whereas in residential providers the average ratio was 1:3.

4.3 Description of the Clients and Staff Observed

The observations which were systematically collected on 16 settings within 31 providers of services to a mixed population of clients indicated that there were 7 distinct types of behavior taking place between clients (peer to peer) and between clients and staff, including:

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*Note: in 13% of the observations, the observer noted that none of the clients in the setting appeared to be severely handicapped according to the definition used in this study.

(1) "Inner-directed" behaviors on the part of the client -- clients acted without observable external cause or interaction with their environments;

(2) Brief staff-client interactions;

(3) Sustained staff-clients interactions;

(4) Interactions between clients and staff during instructional activities;

(5) Interactions between clients (peer to peer) and clients and staff during play activities;

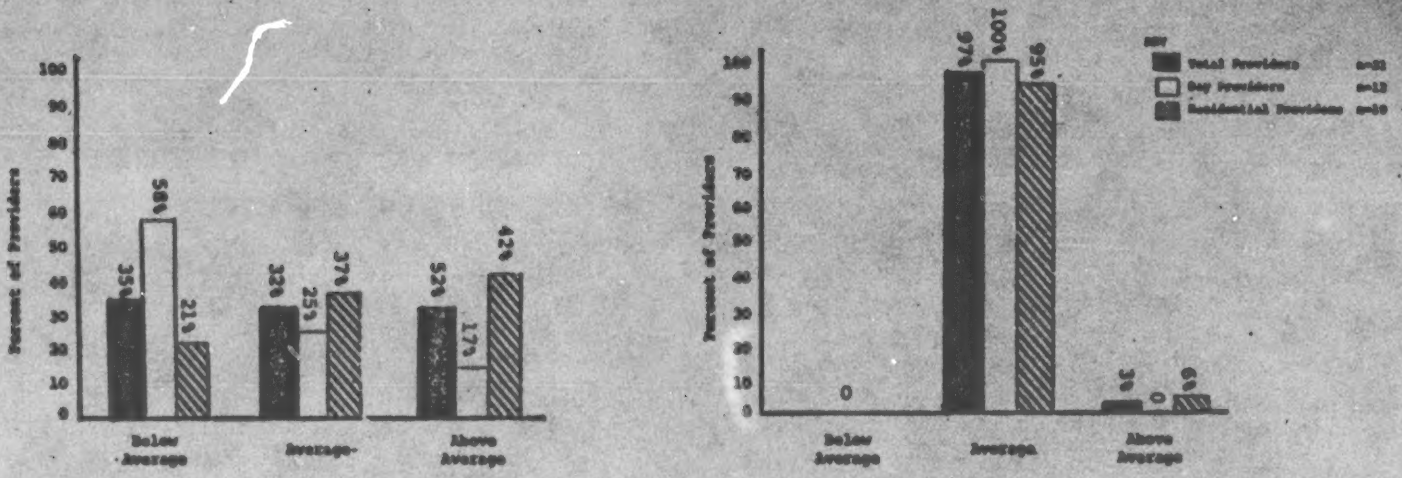
(6) Peer to peer interactions; and

(7) Negative affect on the part of clients -- aggressive behavior.

Figure MIX-2 depicts the prevalence of each of the 7 behavior types in day, residential and combined providers serving a mixed population of clients compared with the average for all providers in the study.

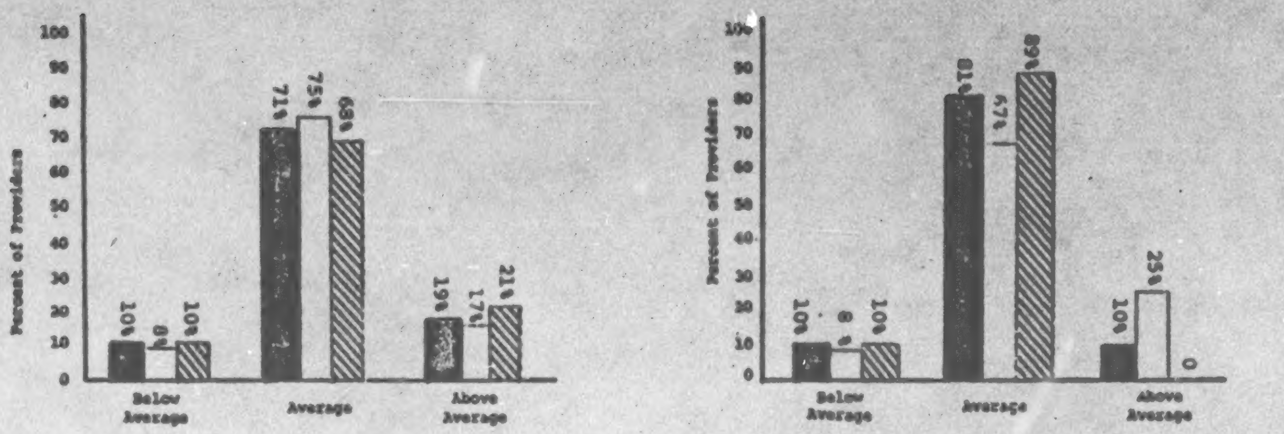
The graphs indicate that there are notable differences in the observations of types of behaviors present in the day and residential providers. Whereas over 50% of the day providers showed below average amounts of "inner-directed" behaviors, over 40% of the residential providers indicated extremely high amounts of this behavior type. On both brief and sustained staff-client interactions, the residential providers exceeded the day providers in the amounts of these 2 types of behavior. When staff-client interactions during instructional activities were observed, however, 25% of the day providers fell into the above average category and the majority of the residential providers were located in the average category.

There was considerable variability among the providers on the interactions during play activities. The majority of the day providers were either above average or average; the residential providers, however, were either average or below average. About 16% of the day providers showed above average amounts of peer to peer interactions while all of the residential providers fell into the average category. One residential provider showed above average amounts of negative affect and aggressive behavior; otherwise, there were no differences between the day and residential providers.



"Inner-Directed" Behaviors

Brief Staff-Client Interactions

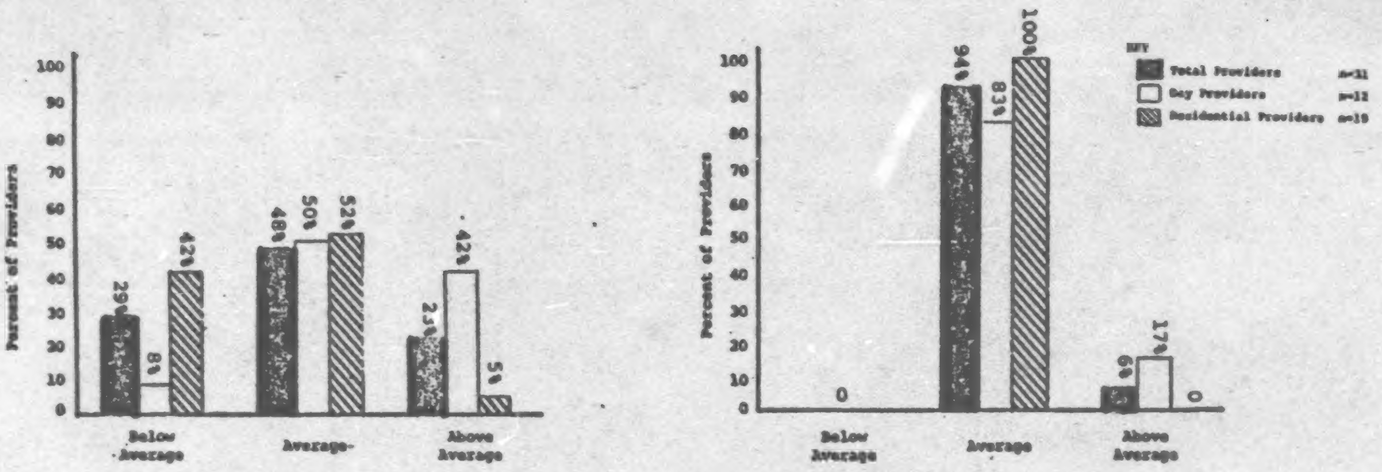


Sustained Staff-Client Interactions

Staff-Client Interactions During Instructions

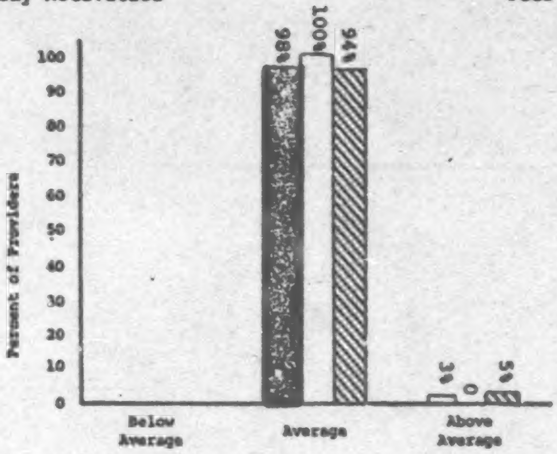
FIGURE MIX-2

PREVALENCE OF SEVEN BEHAVIOR TYPES
IN PROVIDERS SERVING A MIXED POPULATION OF SEVERELY HANDICAPPED CHILDREN AND YOUTH



Interactions During Play Activities

Peer-Peer Interactions



Negative Affect--Aggressive Behavior

FIGURE MIX-2 (CONTINUED)

PREVALENCE OF SEVEN BEHAVIOR TYPES
IN PROVIDERS SERVING A MIXED POPULATION OF SEVERELY HANDICAPPED CHILDREN AND YOUTH

5.0 QUALITY OF PROVIDERS OF SERVICES TO SEVERELY HANDICAPPED CHILDREN AND YOUTH*

5.1 Quality of Educational and Habilitative Opportunities

The quality of educational and habilitative opportunities was high in 77% of the providers serving a mixed population of severely handicapped children and youth, medium in 20%, and low in 3% of the providers. This quality variable is based on 3 component variables:

(1) The range of educational and habilitative materials available to clients;

(2) The percent of staff time spent on educational and habilitative services; and

(3) The amount of client time spent on educational and habilitative activities.

Day providers scored higher than residential providers on the range of educational and habilitative materials available and on the amount of client time spent on educational and habilitative activities. Day and residential providers were of equal quality in terms of percent of staff time spent on educational and habilitative services.**

Figure MIX-3 displays the distribution of day, residential and total providers on the overall quality of educational and habilitative opportunities and on the 3 component variables.

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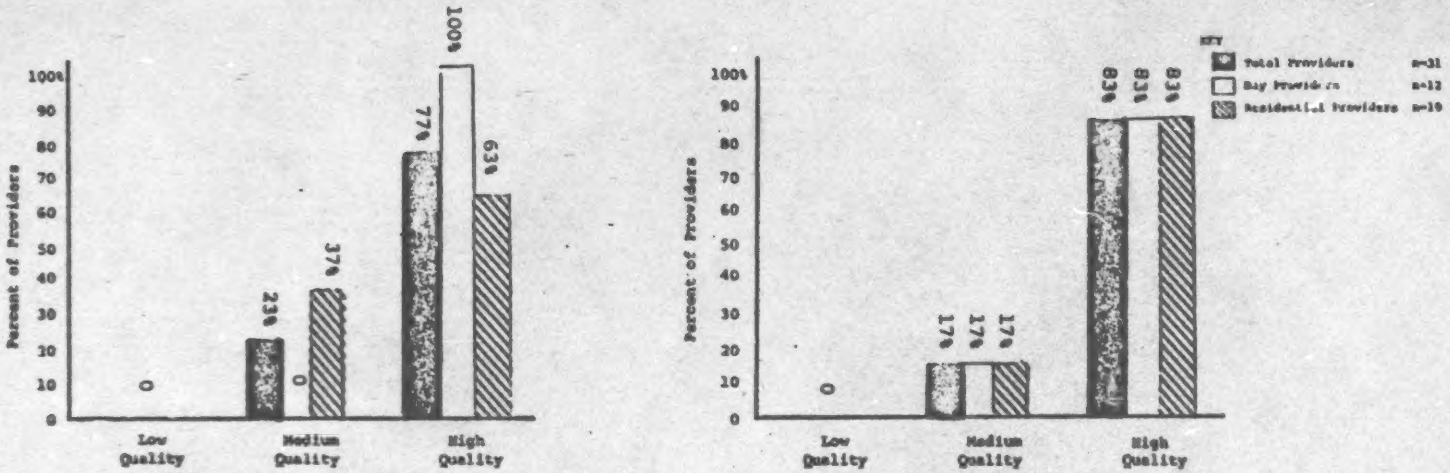
*Note: for a description of the quality model constructed for this study, see pages 10-17 of the Introduction to this volume.

**Note: two factors should be considered in comparisons of quality between day and residential providers:

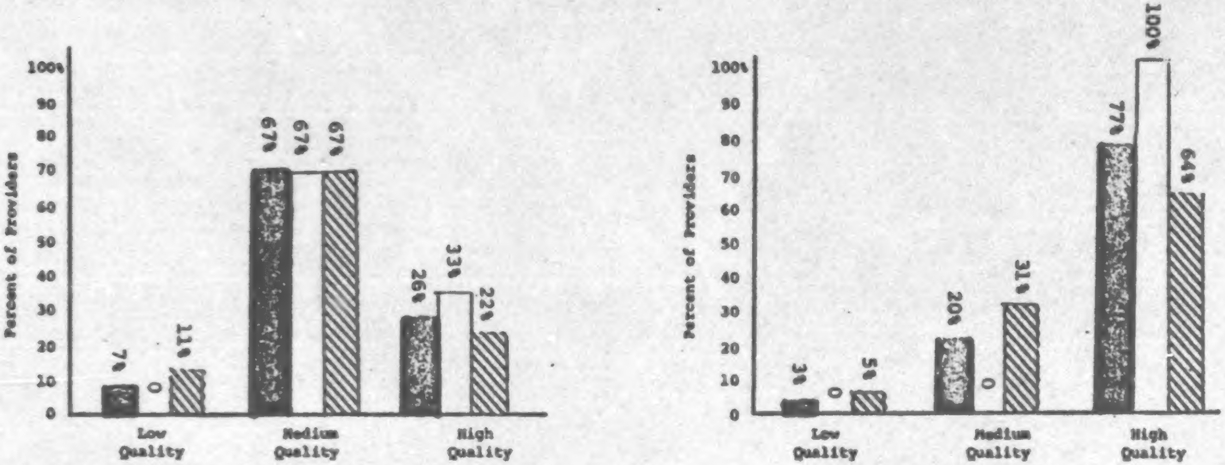
(1) No attempt was made in this study to assess the comparability of the severely handicapped populations in day versus residential providers; therefore differences in quality may actually reflect differences in the needs and characteristics of the populations served; and

(2) Residential providers are concerned with provision of 24-hour care and are therefore different in scope and purpose from day providers, with a far heavier emphasis on basic care services.



Availability of Educational Materials

Percent of Staff Time Spent on Educational/Habilitative Services



Amount of Client Time Spent on Educational/Habilitative Activities

AGGREGATE
Educational and Habilitative Opportunities

FIGURE MIX-3

QUALITY OF EDUCATIONAL AND HABILITATIVE OPPORTUNITIES IN PROVIDERS SERVING A MIXED POPULATION OF SEVERELY HANDICAPPED CHILDREN AND YOUTH

5.2 Quality of Staff-Client Interactions

The quality of staff-client interactions was medium in 10% of the providers and low in 90% of the providers. None of the providers were of high quality on this variable which combines the component variables of:

(1) Warm staff-client interactions; and

(2) Instructive staff behaviors toward clients.

Day providers scored higher than residential providers on both of these component variables.

Figure MIX-4 displays how day, residential and total providers are distributed on the 2 component variables and on the overall quality of staff-client interactions.

5.3 Quality of Parent Involvement

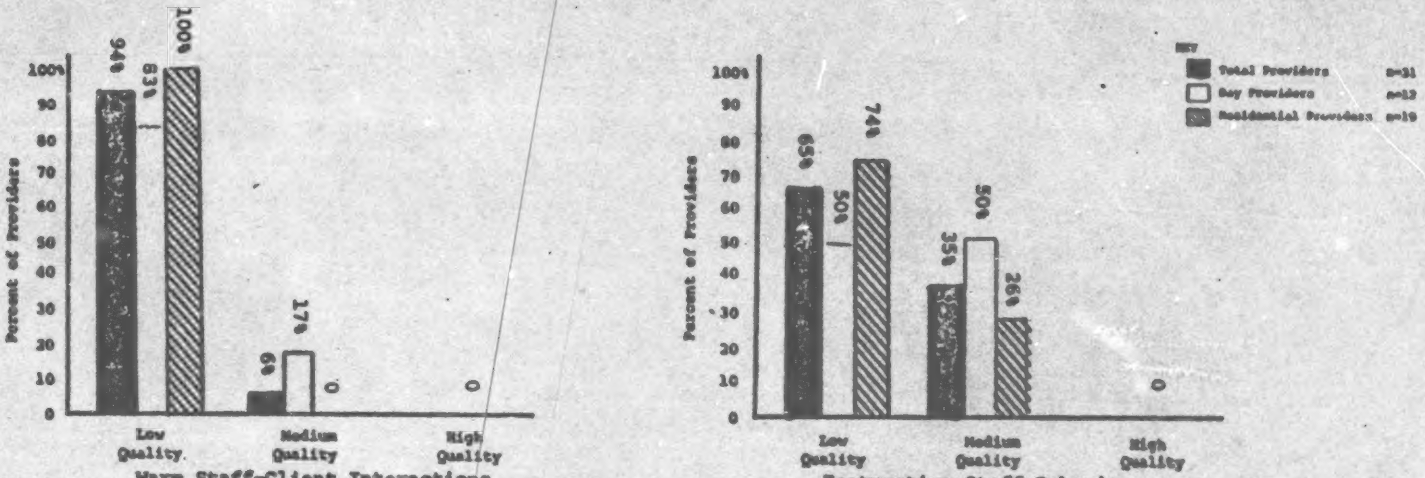
The quality of parent involvement was high in 52% of the providers, medium in 35% and low in 13% of the providers serving a mixed population of severely handicapped children and youth. This aggregate quality variable measures:

(1) The extent of parent involvement in the planning and operations of the provider; and

(2) The extent of parent involvement with the handicapped clients.

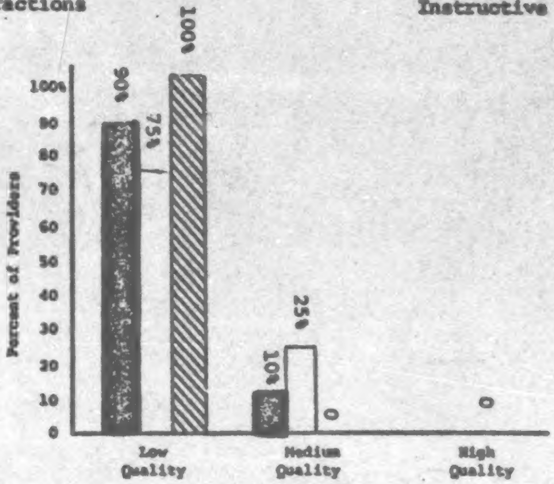
Day providers were of higher quality than the residential providers in terms of parent involvement with the provider. Residential providers, however, scored higher than the day providers on parent involvement with handicapped clients.

Figure MIX-5 displays the distribution of day, residential and total providers on the overall quality of parent involvement and on the 2 component variables.



Warm Staff-Client Interactions

Instructive Staff Behaviors

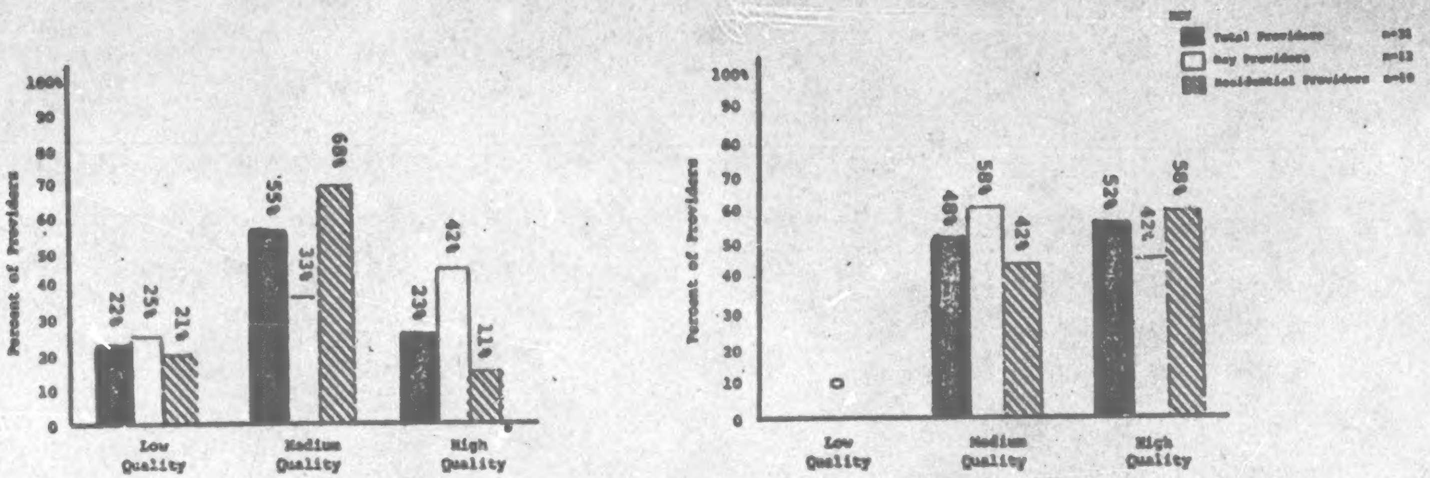


AGGREGATE

Staff-Client Interactions

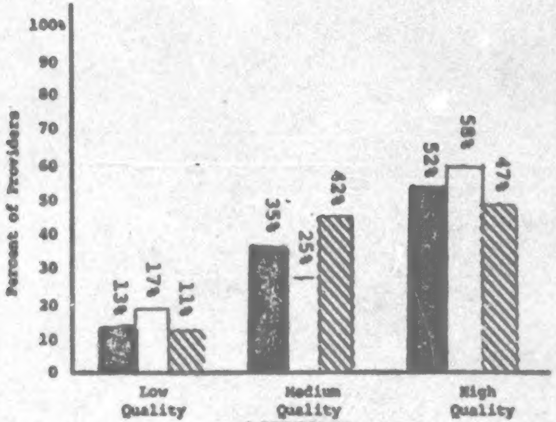
FIGURE MIX-4

QUALITY OF STAFF-CLIENT INTERACTIONS
IN PROVIDERS SERVING A MIXED POPULATION OF SEVERELY HANDICAPPED CHILDREN AND YOUTH



Extent of Parent Involvement with Provider

Extent of Parent Involvement with Child



AGGREGATE

Parent Involvement

FIGURE MIX-5

QUALITY OF PARENT INVOLVEMENT
IN PROVIDERS SERVING A MIXED POPULATION OF SEVERELY HANDICAPPED CHILDREN AND YOUTH

5.4 Quality of Humanization of Institutional Setting

The quality of humanization was high in 16%, medium in 81%, and low in 3% of the providers. The humanization of a provider was measured by 5 component variables:

(1) Provider's respect for clients;
(2) Client privacy;
(3) Noninstitutionalized environment;
(4) Provider's policies regarding personal possessions of of clients; and
(5) Physical comfort of the provider.

Day providers proved to be of higher quality than residential providers in terms of client privacy, noninstitutionalized environment, and policies regarding the personal possessions of clients. Residential providers, however, scored higher than day providers in the areas of respect for clients and physical comfort.

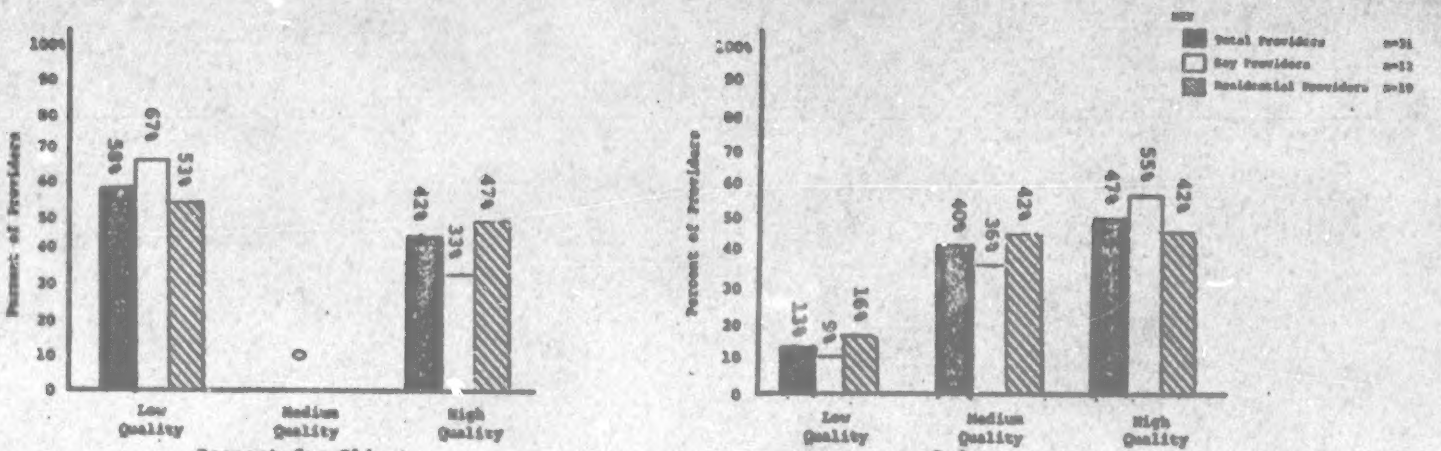
Figure MIX-6 shows the distribution of day, residential and total providers on the overall quality of humanization and on each of the 5 component variables.

5.5 Quality of Extent of Training and Evaluation

The quality of the extent of training and evaluation was high in 55% of the providers and medium in 45% of the providers serving a mixed population of severely handicapped children and youth. This aggregate quality variable measures the extent to which a provider:

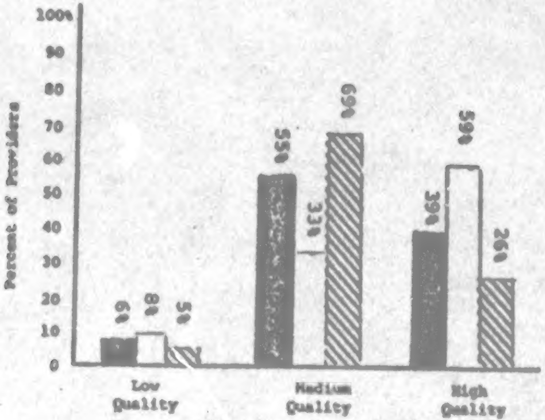
(1) Assesses client progress;
(2) Evaluates its educational and habilitative services and/or its overall program of services; and
(3) Offers staff training.

Day providers were of higher quality than residential providers in terms of client assessments and program evaluations. The quality of staff training opportunities was approximately equal in both day and residential providers.



Respect for Clients

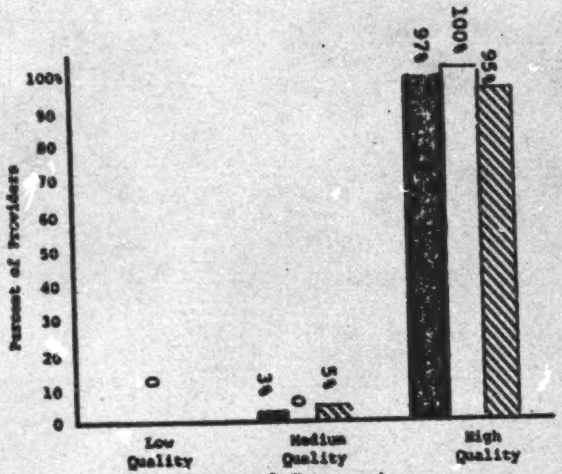
Privacy



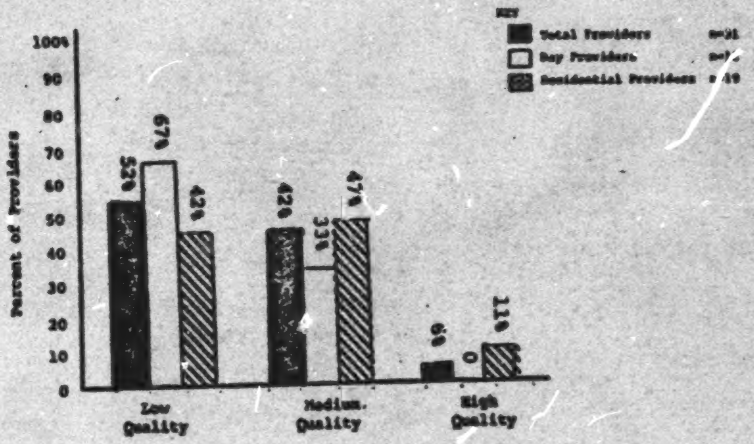
Non-Institutionalized Environment

FIGURE MIX-6

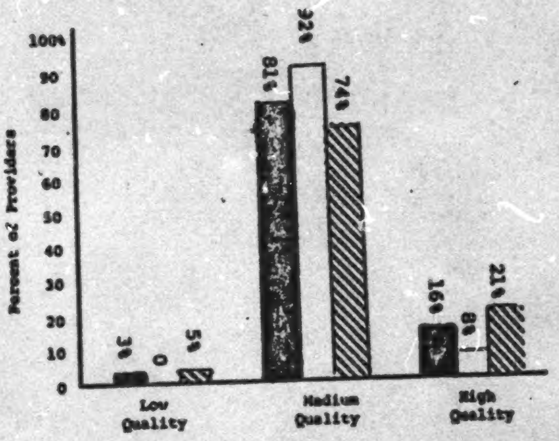
QUALITY OF HUMANIZATION OF INSTITUTIONAL SETTING
IN PROVIDERS SERVING A MIXED POPULATION OF SEVERELY HANDICAPPED CHILDREN AND YOUTH



Personal Possessions



Physical Comfort



AGGREGATE
Level of Humanization

FIGURE MIX-6 (CONTINUED)

QUALITY OF HUMANIZATION OF INSTITUTIONAL SETTING
IN PROVIDERS SERVING A MIXED POPULATION OF SEVERELY HANDICAPPED CHILDREN AND YOUTH

Figure MIX-7 displays the distribution of day, residential and total providers on the overall quality of the extent of training and evaluation and on each of the 3 component variables.

5.6 Quality of Evidence of Client Movement

Evidence of client movement out of the provider was of high quality in 36% of the providers, medium quality in 35%, and low quality in 29% of the providers. This aggregate variable measures the extent to which:

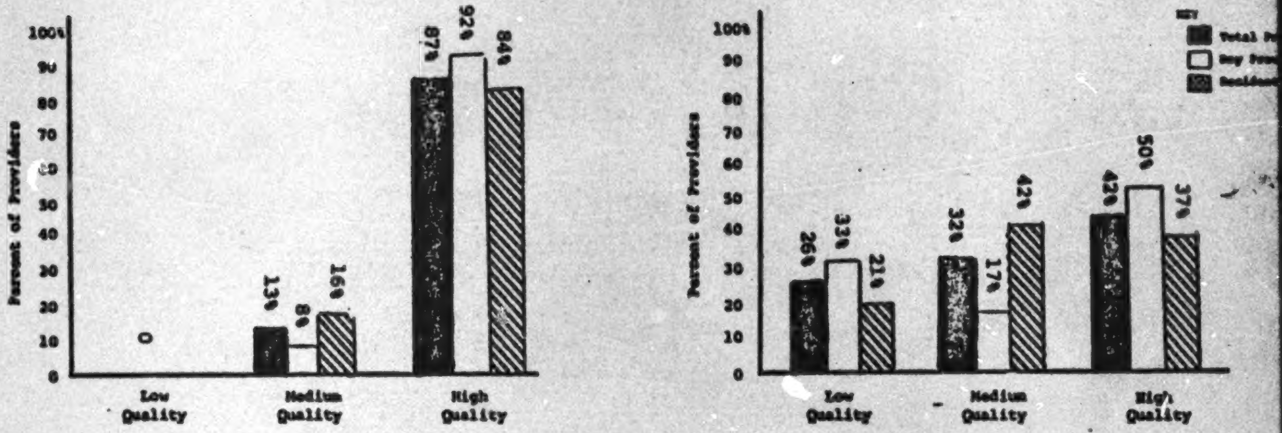
(1) A provider has released clients because their level of functioning improved;

(2) A provider has released clients to less sheltered settings; and

(3) Released clients are receiving educational and habilitative services following discharge from the provider.

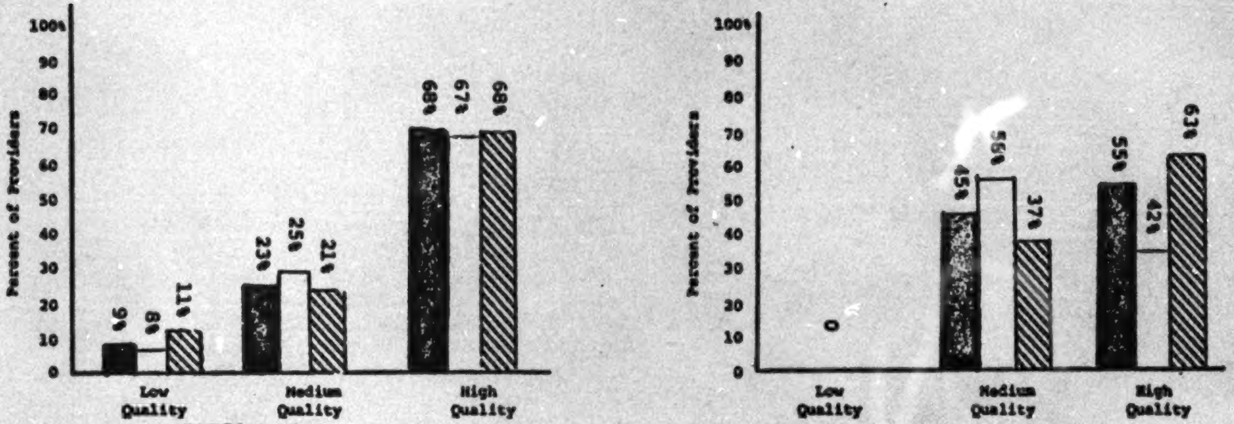
Day providers proved to be of higher quality than residential providers in terms of releasing clients whose level of functioning improved and releasing clients into less sheltered settings. Residential providers, however, scored higher than day providers in terms of released clients receiving educational and habilitative services after discharge.

Figure MIX-8 shows the distribution of day, residential and total providers serving a mixed population of severely handicapped children and youth on the overall quality of evidence of client movement and on each of the 3 component variables.



Client Assessment

Program Evaluation

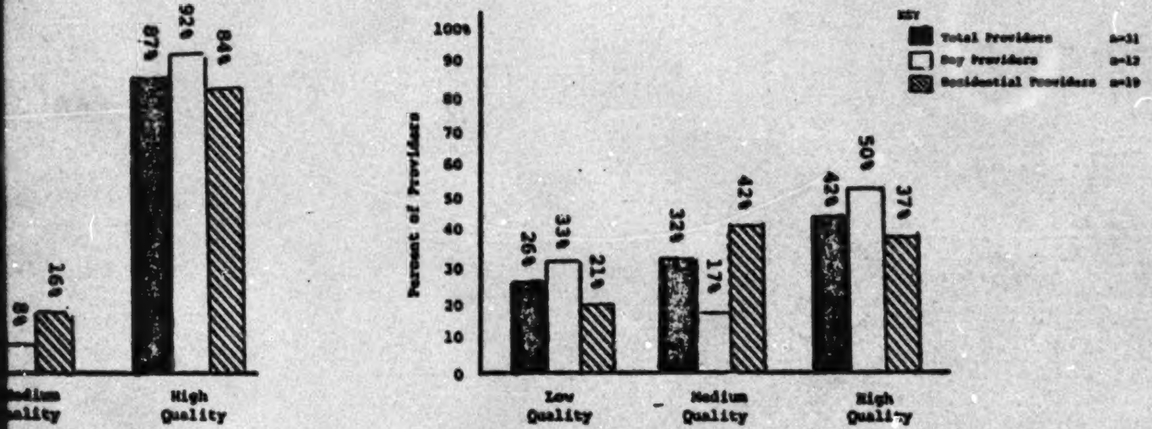


Staff Training

AGGREGATE
Training Evaluation

FIGURE MIX-7

QUALITY OF EXTENT OF TRAINING AND EVALUATION IN
PROVIDERS SERVING A MIXED POPULATION OF SEVERELY HANDICAPPED CHILDREN AND YOUTH



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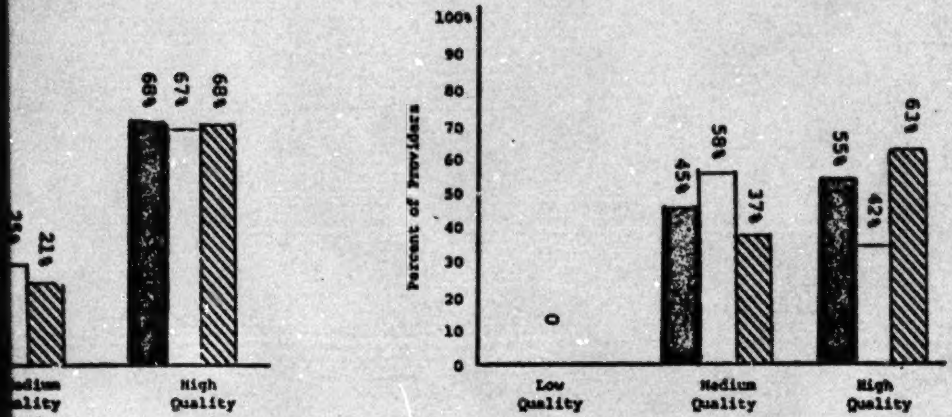
Program Evaluation



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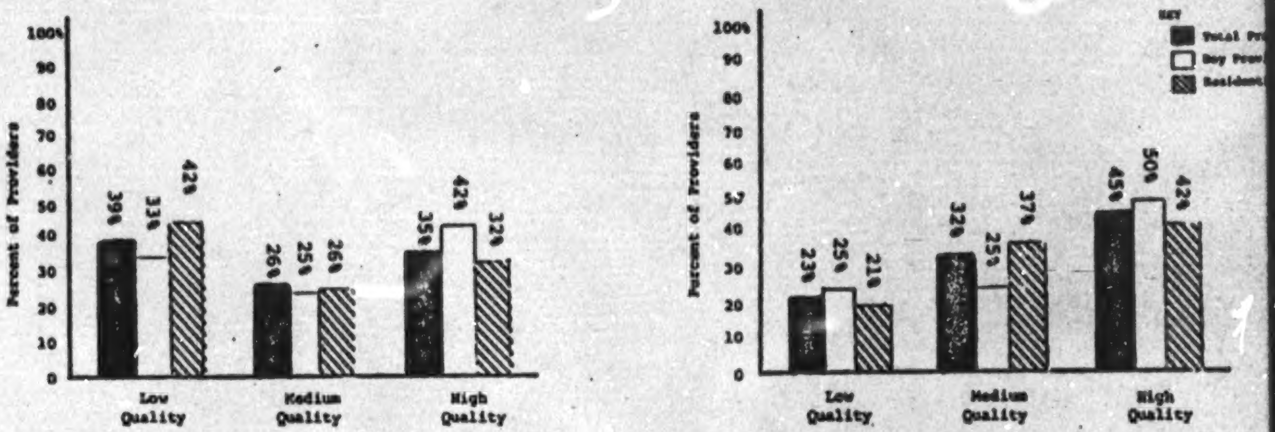
AGGREGATE
Training Evaluation

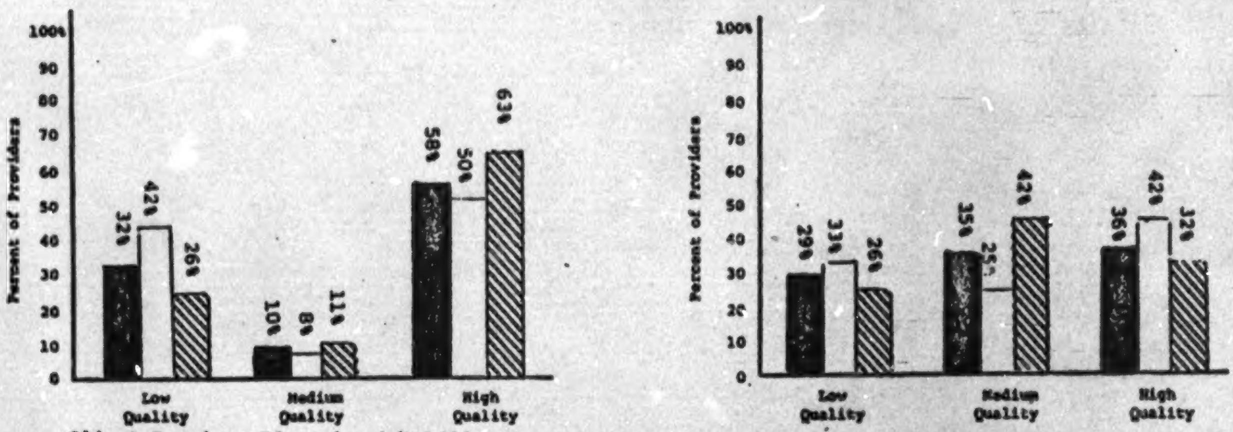
FIGURE MIX-7

QUALITY OF EXTENT OF TRAINING AND EVALUATION IN
SERVING A MIXED POPULATION OF SEVERELY HANDICAPPED CHILDREN AND YOUTH



Client Level of Functioning Improved

Client Movement to Less Sheltered Settings

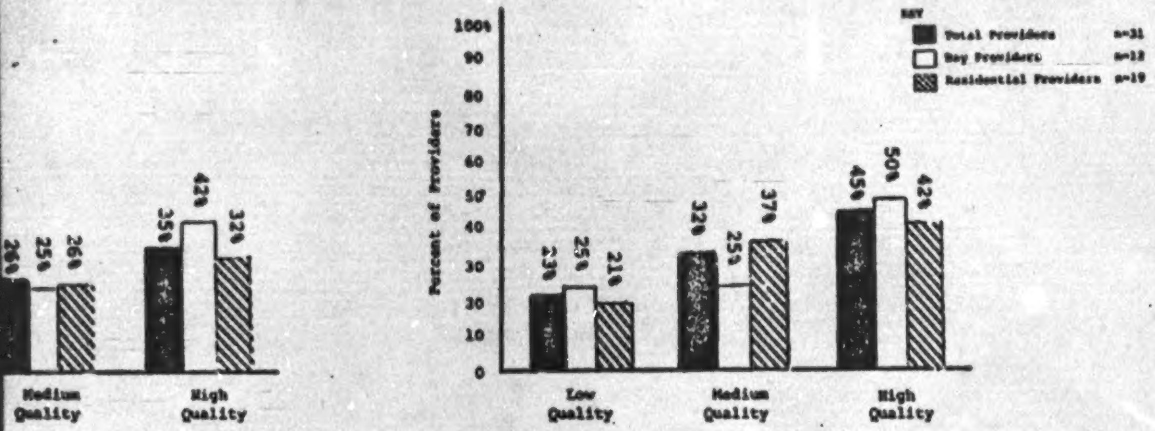


Client Receives Educational/Habilitative Services After Discharge

AGGREGATE
Evidence of Client Movement

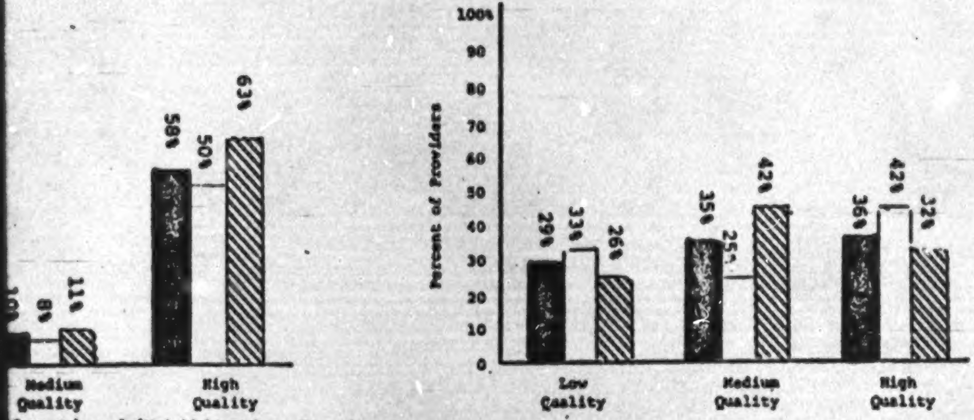
FIGURE MIX-8

QUALITY OF EVIDENCE OF CLIENT MOVEMENT



Functioning Improved

Client Movement to Less Sheltered Settings



ducational/Habilitative Services
ter Discharge

AGGREGATE
Evidence of Client Movement

FIGURE MIX-8

QUALITY OF EVIDENCE OF CLIENT MOVEMENT